

A THESIS SUBMITTED TO THE UNIVERSITY OF KALYANI FOR THE FULFILLMENT OF DEGREE OF DOCTOR OF PHILOSOPHY IN EDUCATION

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CERTIFICATE

This is to certify that the research work entitled "A study of Instructional effectiveness, Self-concept and Test anxiety on Distance and Traditional Learners" submitted by Shri Gokul Ch. Patra in fulfilment of the award of Ph. D. Degree in Education under the Department of Education, University of Kalyani is based on the results of research work accomplished by him. No part of this work has been submitted for any other degree or for publication with prior permission as per rule. He has completed the research work under my guidance.

Date: 28/10/13

Bludhuhm. Including

Dr. Dibyendu Bhattacharyya, Associate Professor, Department of Education, University of Kalyani



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CHAPTER – I INTRODUCTION

Distance education is emerging in a wide range of domain in India But simultaneously there are not well managed system which can control the quality education in both the distance as well as traditional education system. The people can only manage a complex procedure in the traditional and distance mode of education, when they are well equipped. Such a vision can build the actual quality assurance activities in traditional and distance mode of learning. These activities are based at the best on a model of good or effective instruction. The question of what makes instruction effective has been in the focus of educational and psychological research for decades. It is obvious and helpful for instructional practice that research results are reviewed from time to time.

Within the Open University movement, internationalization has manifested itself through direct distance delivery, partnership arrangements, franchising, the sale of curriculum, and the opening of branch campus operations. Other opportunities may emerge as private sector deliverers, national governments, and public institutions reflect on how fiscal and social mandates can be met in the new economic and technologically enabled environments International experience is valuable to students in an increasingly globalized world. A survey on the internationalization of higher education, conducted by the International Association of Universities in 2005, drew responses from universities on most continents and from national university associations A majority of respondents identified internationalization as important to their institution

ICT-enhanced higher education (open and distance learning, virtual universities, e-learning, open educational resources) is likely to become the most significant driver of cross-border provision. As this happens, challenges will arise as both institutions and governments attempt to control accreditation and, often with the best intentions, globalize their accreditation systems

1.1 Background of the Study :

Review represents the goal of Instructional strategy will focus on

- results of research which are repeatedly confirmed and which meet criteria of social empirical research (e g, Atkinson, Derry, Renkl, & Wortham, 2000, Dubs, 1995, Haemic, 2002, Helmke & Weinert, 1997, Slavin, 2000),
- approaches which not only consider cognitive characteristics of students as relevant for learning, but also motivational and emotional aspects (e.g., Astleitner, 2005, Astleitner, 2000; Bergin, 1999),
- experiences which allow to establish a nation-wide quality assurance system for improving the effectiveness of instruction (eg, Baumert, Artelt, Klieme, Neubrand, Prenzel, Schiefele, Schneider, Tillmann, & Weiss, 2003);
- practical approaches which do not only consist of traditional methods of instruction, but also reflect new developments which assist in facing global educational competition (e.g., Mayer, 1999; Paris & Paris, 2001) and
- effective instructional strategy (instructional strategy-Schreens, 2004)

However, it should be the aim of instructional designers to reflect these principles periodically as general instructional standards when planning and evaluating instructional activities These principles are :

Principle 1 : Instructing based on a Design for Reflexive Learning: How much in Distance and in traditional learning ?

During instruction, the student should get the possibility to reflect on learning Reflective learning represents an active process of construction in which memory contents are – mediated by thinking processes – changed, expanded, linked, structured, or created Both in distance and traditional mode reflective approach is neglected This goal can be achieved by basic characteristics of good instruction

- Taking preventive steps to implement instructional methods without disturbances and to handle successfully critical events (e.g., emotional conflicts of students),
- Realizing a suitable, not maximal pace of instruction and a sequence of instruction which allows students and teachers to have enough time for thinking and asking questions,

- Presenting contents and tasks organized and clearly;
- Varying instructional methods during different phases of instruction,
- Focusing instruction consequently on teaching goals and offering plenty of possibilities for exercising,
- Considering individual differences and learning progresses and
- Establishing a good social-emotional climate between students and teachers

Principle 2 : Multiple supporting of Cognitive, Motivational and Emotional Characteristics

On the basis of this principal both the distance and traditional learning should be multidimensional But the reality is not like that in most where root memorization is the only way to success Good instruction consists of a joint usage of several instructional methods with different effects on single characteristics of students.

Good instruction not only supports students in thinking and learning, but also motivates them and offers an emotionally sound context. Instruction produces cognitive effects if teaching goals are stated, pre-knowledge are activated, stimulating contents are presented, learning processes are guided, feedback on tasks is given, learning progress is evaluated, and knowledge transfer is guaranteed.

Instruction motivates students if attention is aroused, the relevance of the contents is shown, the self-confidence is strengthened, and satisfaction with the results of learning is achieved. In respect to emotion, instruction should decrease negative feelings (above all fear, envy, and anger) and increase positive feelings (above all sympathy and pleasure) Multiple support means that the methods for influencing cognitive, motivational, and emotional processes should be applied in a way that these methods are complementary to each other and do not disturb the effects of the other methods.

Current trends, or future trends that focus on education are wide and varied Stopping to survey the educational landscape can be daunting Trends (or directions)

• How can all students be engaged in the learning process ? It is more than merely "entertaining" them, it is more than keeping them "active" in the process Is engagement something that can be designed ?

- What role does or should technology have in engaging students ? Can technology be used to reduce the "divide" ?
- Given the desire to promote collaboration, is technology a natural vehicle for collaboration ?
- With the "flattening" of skills, and the new shift towards a global marketplace, education must change, but how ?
- Ref : Journal of Instructional Psychology, March, 2005 by Hermann Astleitner, Trends, technology, teaching and learning : reflections and perspectives

Effective Instructional Strategies :

Researchers have identified instructional strategies that show positive, measurable effects on student achievement. Scholars Robert Marzano, John Hattie and Harold Wenglinsky analyzed this research and identified strategies that can be categorized into two macrostrategies (metacognition and active student engagement) and three microstrategies (higher-order thinking, cooperative learning and independent practice)

In the present study such strategies both in distance and in traditional mode are to be evaluated in a comparative way

Despite this evidence, teaching strategies that incorporate meta cognition are seldom common classroom practice Marzano identifies three processes for teaching metacognitive skills :

- providing students with specific learning objectives before each lesson,
- providing feedback on the processes and strategies students use, and
- giving students time to consider how to approach a task, then reminding students to activate specific thinking behaviors

Active Student Engagement :

Teachers who actively engage students use hands-on lessons that require students to use multiple learning skills and higher-order thinking to construct meaning and knowledge To be effective, activities need to channel student thought and action to meet specific educational objectives A valuable resource for teachers would be examples of strategies that help them to actively and effectively engage students Generally, these strategies fall into three categories : higher-order thinking, cooperative learning and independent practice

Higher-order thinking This can be described as the ability to use information to solve problems, analyze arguments, negotiate issues or make predictions It involves examining assumptions and values, evaluating evidence, and assessing conclusions. Much normal thinking occurs in default patterns that are hazy, narrow and sprawling To improve students' ability to think using higher-order skills, teachers must teach specific methods that combat these default patterns. Research suggests that higherorder thinking skills can lead to immediate and long-term improvements in achievement and can transfer to other disciplines

Cooperative learning Studies on cooperative learning indicate a strong impact on student achievement as well as increased motivation and improved social interactions with adults and peers. To make the strategy most effective, teachers should group students heterogeneously and eliminate competition among groups.

Independent practice / homework Research shows the positive effects of homework can be greatly increased when assignments are regular and not too lengthy, provide practice in skills and procedures targeted in recent instruction, and elicit teacher feedback Well-designed homework assignments can also promote active parent involvement

Research shows these instructional practices contribute to higher levels of student achievement

- Identifying similarities and differences
- Summarizing and note taking
- Reinforcing effort and providing recognition.
- Homework and practice
- Nonlinguistic representations (e.g., mental images, graphs, acting out content)
- Cooperative learning
- Setting objectives and providing feedback.
- Generating and testing hypotheses.
- Activating prior knowledge (1 e , via questions, cues, advance organizers).

(Marzano, 2003)

Good Instruction requires the following points :

- Good relationship with the teacher.
- Clear expectations.
- Hands-on activities.
- Assignments related to real life

(Walsh & Sattes, 2000)

Increasing Globalization and Internationalization of Higher Education :

- globalization, defined as the flow of technology, economy, people, values, and idea across,
- borders, is having a profound impact on most aspects of society and is a significant factor,
- impacting the nature and function of higher education

In relation to higher education, globalization can be defined, on one hand, in terms of the economic, technological, political, and societal forces opening access to twenty-first century higher education, which has for much of the past century been owned by the upper and, to a lesser degree, the middle classes of the developed world On the other, it can mean increasing the exposure of traditional learners to international experiences and also in case of distance education. One definition focuses on increasing the massification of learning throughout the world, the other on increasing understanding and connection.

Internationalization does increase capacity at lower cost, particularly for graduate students, and it should create greater cultural awareness Many nation states believe that it also fosters economic competitiveness A contrary view, held by many in developing countries, is that capacity building through the temporary export of brains ultimately results in the removal of the best and brightest from their own futures

Evidence of increasing internationalization is generally manifest in a

significant increase in the cross-border activities of higher education institutions Cross-border higher education is fueled in part by the growing worldwide demand for higher education and is characterized by increased mobility of students, courses and programs and increased mobility of institutions across national borders

Worldwide Growth and Increasing Demand for Access to Higher Education :

On 10th December 1948, the General Assembly of the United Nations adopted and proclaimed the Universal Declaration of Human Rights The Assembly called upon all member countries to make public the text of the Declaration and "to cause it to be disseminated, displayed, read and expounded principally in schools and other educational institutions, without distinction based on the political status of countries or territories". Article 26 of the Declaration proclaims that "everyone has the right to education" and that "higher education shall be equally accessible to all on the basis of merit"

Higher education has expanded remarkably in recent decades Growth is, by all measures, faster than anticipated. Projections gave 120 million students worldwide by 2020, but that number has already been achieved.18 In 2004, 132 million students were enrolled worldwide, up from 68 million in 1991 Average annual growth from 1991 to 2004 was 5 1 percent Most of this growth has been in Africa, Asia, Latin America and the Caribbean, the Arab countries, and in Eastern and Central Europe China and India have doubled their enrolments in the past 10 years alone

It is generally acknowledged that open and distance education is a good way of reaching out to large numbers of students India accounts for a quarter of the developing world's population and has the third largest higher education system in the world

Approximately 24 percent of all higher education students in India are enrolled in distance education institutions, specifically in the national and state open universities and the 106 institutions, mostly public, which offer both on campus and correspondence programs under the auspices of the Commonwealth of Learning, of the development of the Indian state open universities concluded that ODL (open and distance learning) has vast potential in a country like India with millions of young aspirants eager to receive higher education and with conventional universities and colleges simply not being in a position to accommodate them. The infrastructure for the expansion of open universities is fairly good in the country, especially the mega OU, Indira Gandhi National Open University (IGNOU) willing to help the SOUs (State Open Universities)

Attitude of Participants towards Distance Education System :

Attitude of participants and the community towards distance education has been treated as one of the criteria in studying the success of distance education A survey of employed persons in Kerala, mainly clerks with bachelor's degrees, revealed that evening college education was preferred to correspondence courses for further education (Pillai 1980) However, the learners continuing with distance education courses had expressed positive attitude towards the system In comparison with the male students, the female students had expressed more favourable attitude towards it; and in the same way, employed students were more positive than unemployed students (Sahoo and Bhat, 1987) Around 50% of the teacher and student respondents in Khan's (1982) study expressed positive opinion towards distance education, whereas the remaining 50% were either neutral or negative about it Sahoo (1985) revealed that even though distance teachers had positive attitude towards the system, around 7 1 percent of them reported that they intended to leave present positions and join regular colleges/departments, provided they get opportunities to do so They expressed their views anticipating greater scope for research and professional growth in a conventional institution

Economics of Distance Education

One of the major reasons for the fast growth of distance education is its cost effectiveness While using suitable methodology, studies can be conducted on the cost effectiveness of distance education comparing it with the costs of formal courses There exists a need for studying differential cost structures also, including differential allocation of funds to different activities and components of distance education Such analyses will be useful in evolving a suitable and optimal financial structure for distance education institutions Studies conducted in India in this area can be classified under five headings ·

- Sources of income in the system,
- Expenditure of the system under different heads and its comparison with total income,
- Unit costs of different types total institutional cost, teachers' unit cost, nonteacher unit cost and private unit cost,
- Comparison of unit costs of distance education with those of regular courses and
- Cost benefits, especially in comparison with those of the regular streams

Sources of Income in a Distance Education System

It has been revealed that in the case of almost all distance education institutions, one of the major sources of income is students' fees (Dutt, 1986; Biswal, 1979, Pandey, 1980; Khan 1982, Sahoo, 1985, UGC, 1986 and Gupta, 1987) The fee structure of distance education in Rajasthan University analysed by Gupta (1987) revealed that the major share of tuition fee to total fees charged from learners varied from 91.70% to 97.32% during 1972–1985. In the case of Himachal Pradesh University, the income raised through learners tuition fees to total income varied from 98.3% to 96 05% during 1975–1987 (Sahoo, 1989) Dutt (1988) identified learners contribution as 28% to 50% of the total income of Delhi University during 1980–86 The rest of the income came in through subsidies provided mainly by the governments Srinivasacharyulu and Ramaiah (1994) urged the state governments and other financing agencies to pay more attention to the funding of distance education institutes

Comparison of the Income and the Expenditure in Distance Education

It has been observed that in the initial stages the distance education institutions had surplus budgets (Biswal, 1979) The surplus budgets of institutions in Rajasthan, Himachal Pradesh and Punjab has been noted by Dutt (1978), Sahoo (1985) and Gupta (1987) have indicated However, Sahoo's 1989 study indicated that during the eighties (1980-87), the Himachal Pradesh University maintained a total deficit of Rs 6.9 million The UGC (1986) study revealed a mixed picture of expenditure and income

levels of distance education institutions Out of fifteen universities, four had annual surplus funds varying from Rs 4 75 million (Jammu) to Rs 2 97 million (Annamalai) Five Universities ran deficits between Rs 0 14 million to Rs 1 61 million (Punjab, Himachal Pradesh, Utkal and Kerala). Only Andhra University had a balanced budget The surpluses have been used either for the distance education institutions during other years, but mainly for the parent university. Deficits are met by the universities from their consolidated funds and grants received from the state governments and the UGC as the budget of distance education institutions has been a part of the integrated budget of the concerned universities (UGC, 1986)

Unit Cost Analysis in Distance Education :

Unit cost analysis has been a common feature of all the studies conducted in the area of Economics of Distance Education Taking into consideration the data, from 1973 to 1976 of B.A. Courses of 7 Universities, Yadav and Sharma (1988) found that the total unit costs varied from Rs.269.71 to Rs 451 82 In the case of UG and PC courses of the Himachal Pradesh University the total cost per student was calculated as Rs 391 60 and Rs.360.22 for the years of 1978-79 and 1979-80 respectively (Salioo, 1985) In the case of the same university the per student cost of UG and 'PG courses varied from Rs 260 00 during 1972-73 to Rs 613 during 1985-86 Gupta (1987) found that the per capita expenditure at Rajasthan University ranged between Rs 133 77 and Rs 695,29 during 1972-73 to 1979-80 The UGC (1986) revealed that the average expenditure of twenty-three DE institutions was Rs 469 77 per student during 1980-81 Highest per capita expenditure was observed at Utkal University (Rs 1,268 72) and lowest was the Kurukshetra (Rs 63 94). In the case of APOU (presently named as B. R. Ambedkar Open University) this was around Rs 1200 00 (Dutt, 1986) The cost per student of Delhi University came down from Rs 801 in 1980-81 to Rs.563 in 1985-86 (Dutt, 1988)

The unit private costs of two year M A and M Com courses at the Himachal Pradesh University during 1978-80 were Rs.2450.00 and Rs 3000 00 respectively, for M Ed, it was around Rs.1700 00 and for B A it was around Rs 2400 00 (Sahoo, 1985) In the case of seven distance education institutions of Delhi, Punjab, Punjabi,

.

Bombay, Sri Venkateshwara, Madurai Kamaraj and Meerut the unit private cost for B A Courses during 1973–1976 varied from Rs 171 00 to Rs 262 00, while the teaching unit costs varied from Rs 58 00 to Rs 98 00 and the non-teaching unit costs from Rs 165.00 to Rs 359 00 (Yadav and Sharma, 1987)

Most of the studies conducted on comparison of unit costs of correspondence courses and face-to-face courses revealed that the unit costs of correspondence courses were lower than those of face-to-face courses, in some cases as low as 10 percent of face-to-face course unit costs (Biswal, 1979, Pandey, 1980 and Gupta, 1985) However, Agarwal (1986) revealed that in the case of professional training courses, the unit cost of correspondence course was higher by 39 percent than that of face-to-face courses. The nature of the institution was not considered for comparison of costs in this case. The above studies are at the higher education level

Gaba (1999) did cost analysis at the school level with focus on designing and development of self instructional material. The study revealed that most of the expenditure was incurred on printing (75 percent) followed by salary to the academic staff (12 percent). There is a negative correlation between the number of students enrolled and the unit cost

Cost Benefit Studies :

Two studies, Pandey (1980) and Gupta (1985), have attempted to make cost benefit studies with reference to different cost components in India Pandey's (1980) study, which was conducted on 10 sample universities, revealed that

- there was significant difference between regular and correspondence streams with regard to recurring income Correspondence courses supported themselves without government subsidy and mostly depended on students' contribution However, with regard to non-recurring income, no difference was marked between the two streams On the total income, there existed differences between the two streams,
- the differences in recurring and non-recurring expenditure of regular and correspondence education were not different although their heads of expenditure were not similar,
- significant differences existed between per student expenditure on direct cost,

indirect cost and total cost of enrolled and appeared level, whereas no significant difference was marked with regard to direct cost per student for pass level However, there existed differences between per student expenditure on indirect cost and total cost at pass level,

- there was no difference in terms of wastage cost per student at direct, indirect and total levels of the two streams,
- the difference between the direct cost per student failure was not significant, but that for indirect cost and total cost per student (failure) were significant,
- the 1978 study reveals that the correspondence education was more economical, as the total cost benefit per student was Rs 2823 14 at undergraduate level

Analysing the relationship between student strength and cost per student in the case of all DE institutions at university stage, Dutt (1986) found the correlation coefficient as low as 0.26 Sahoo (1985) revealed that the rate of growth of enrolment did not equally affect all aspects of expenditures of distance education since there existed a low relationship between student strength and different components of expenditure

 Table 1 : Comparison of Distance Training Costs vs. Traditional Classroom

 Training

| Dist | ance Training | | Traditional Training | | |
|---------------|-----------------|----------|----------------------|--------------|------------|
| Distance | Average costs | Class | Class room | Average | Class room |
| training | per participant | duration | presenter | costs per | duration |
| source | In US \$ | | | participants | |
| | | | | ın US \$ | |
| Tele | 30 | 6 hours | Senior | 40 | 8 hours |
| Learning | | | Manager (1) | | |
| Online | 10 | 6 hours | Mid Career | 55 | 8 hours |
| | | | Instruction (2) | | |
| Self Paced | 12 21 | 6 hours | Junior | 20 | 8 hours |
| Compute Based | | | Instructor | | |

Note Actually delivery cost does not include course development cost

Source Jo L Longnecker (2001) Attracting, training and instructors for distance learning at the US general account office, Zane L Berge (eds), Sustain Distance Training, San Francisco Jossey-Bass It has been proved from the studies conducted by Zane L Berge (2001) and Constantine Osiakwan & David Wright's (2001) that distance training is cost-effective and profit generating

University Courses in General and Distance Mode :

University Environment reflects the physical and psychological aspects of the academic aspects that are more susceptible to change and that provide the preconditions necessary for teaching and learning take place.

University Environment, the focus of this evident in the feelings and attitudes about a course expressed by students, teachers, staff and parents-the way students and staff "feel" about being at school each day

University Environment is a significant element in discussions about improving academic performance and reform. It is also mentioned in discussions of potential solutions to problems such as performance level and vocational ability of students are being satisfied both in distance and in traditional mode

Components of University Environment :

Although there is no consistent agreement in the literature on the determinants of University quality education, most writers emphasize caring as a core element However, some place safety foremost, defining it "as orderly environment in which they feel valued and able to pursue the mission free from concerns about disruptions and safety"

Several aspects of a university's physical and social environment comprise its climate One organization identified the following areas :

- Appearance and physical set-up.
- Faculty relations
- Student interactions.
- Leadership or decision making

Numerous studies document that students with a better university climate have higher achievement and better socio-emotional health Probably the most comprehensive work in this area is being done by the Search Institute, a nonprofit organization that encourages and communities to develop and empower young people

In a review of studies on the impact of support the Search Institute found that a caring both traditional and distance mode are associated with Academic Achievement both in qualitative and quantitative way with the help of following points ·

- Higher grades
- Engagement.
- Attendance
- Expectations and aspirations
- Sense of scholastic competence.
- Fewer school suspensions.
- On-time progression through grades (19 studies)
- Higher self-esteem and self-concept (5 studies).
- Less anxiety, depression and loneliness (3 studies)
- Less substance abuse (4 studies).

Another study by John Schweitzer of Michigan State University, found that when students in Detroit schools felt a sense of community with one another and a sense of belonging to their schools, they achieved higher scores.

A national study of more than 12,000 seventh to twelfth graders found that connectedness significantly protects youth from their performance

Changing Environment and Instructional Effectiveness :

Improving student behavior and academic performance generally requires changing climate and l culture Change may require moving individuals and organizations along a continuum from "at risk" to "safe" to "thriving". This process takes time to accomplish

While making positive changes in climate motivates staff and students to improve, it must also change if reforms are to be sustained for long-term improvement

Some Approaches towards Effective Criteria :

• All can and must learn.

- Maintain buildings in good physical condition for infrastructure
- Reward students for appropriate behavior
- Enforce consequences for inappropriate behavior
- Use contracts with students to reinforce behavioral expectations
- Post behavioral policies on bulletin boards, periodically announce them over the public address system
- Initiate anti-bullying, conflict resolution and peer mediation programs
- Engage students, staff and parents in planning for safety activities
- Increase number and accessibility of counselors, social workers and mentors.
- Create anonymous tip lines or suggestion boxes for reporting potentially dangerous situations or providing ideas to improve school climate
- Develop strategies to ensure safety during lunch periods and between classes; provide more structured activities during lunch hour
- Provide accommodation or time-out rooms throughout the day
- Provide in-school suspension programs with academic supports and consistent staffing

According to Kelli Ballard and Alan Bates Accountability, high-stakes, and student achievement are popular terms among educators Students' performance on standardized achievement tests is used to a high extent in reflecting the quality of instruction students receive from teachers as an intraculture

According to Vandevoort, Amrein-Beardsley and Berliner (2004) the quality of a teacher in the classroom is the single most important factor in determining how well a child learns Throughout the United States, schools are being evaluated based on their students' performance on a state mandated test given every year for the betterment of the total process The two main purposes of are

- 1) Teachers' Accountability,
- 2) Assuring quality and facilitating improvement institutional atmosphere

It will best be achieved when teachers and their organizations claim the responsibility for developing and implementing methods for assessing their performance that respect the complexity and depth of their professional knowledge and practice (Kleinhenz & Ingvarson, 2004) In other words, do current teacher evaluation procedures assess all the components that teachers are supposed to possess ?

The majority of educators agree with the fact that holding teachers accountable is imperative for student learning to take place However, a lively debate surrounds the question of how accountability is established and about the place and value of professionalism in accountability (Bullough, Clark & Patterson, 2003)

According to Gallagher (2002) schools such as Vaughn Elementary in Los Angeles, California evaluate teachers in ten domain areas, and teachers are not only evaluated by their principal, but by peers and themselves, too. Teachers are rated on a scale of one to four on each standard This school found that the alignment between taught and tested curriculum, both in terms of content and cognitive demand, is a highly significant predictor of student performance. This study did make it clear, however, that no single measure should be seen as the sole criterion for judging performance rather than combining both the intra and inter cultural determinants for academic success

Academic Achievement and Some Related Views :

As Gallagher (2002) concurs, most people would argue that teaching requires a variety of proficiencies that can justifiably contribute to teacher evaluation, yet which may only indirectly influence student performance on a given assessment Teachers need to become familiar with current research on student achievement and network with colleagues to learn more about teaching expertise and in distance mode learning it is more challenging

Teachers are responsible for finding ways to educate all children and it is a teacher's duty to participate in professional development activities that foster this responsibility Practices such as differentiated instruction, data driven instruction and identifying areas of weakness in students are crucial to developing the quality of classroom teachers Differentiated instruction is vital for increased student performance because it meets the needs of every student This connects to the notion of schools making improvements based on test data, especially in weak areas

Teachers need to remember that external characteristics, such as student socioeconomic status and parental educational attainment, impact student achievement in significant ways, but when those differences are controlled for, teachers are the most important determination of student instruction (Gallagher, 2002) These findings support the views of Bullough *et al* (2003) that if, as some teacher education detractors argue, academic ability and scores on standardized achievement tests are good measures of teacher quality, these students ought to be outstanding

Study regarding Self-Concept and Test Anxiety :

Another factor that influences student achievement is the status and parental level of education as well as the home/family background were found to be uncontrollable factors in the classroom where high stakes tests were administered Other schools have relatively high test scores and their student population consists of primarily low-income students with little parent involvement, which argues against the excuse of not being able to control certain factors. Student performance on high stakes tests can cause increased levels of anxiety, stress, and fatigue. All three have detrimental effects on student performance (Abrams, Pedulla & Madaus, 2003)

- Motivation and responsibility of the individual student
- Socioeconomic status
- Students with high test results are rewarded externally
- For students who do not perform well, such as those with test anxiety, language barriers, or special education students who are required to take a grade equivalent test, this extrinsic reward system can be devastating
- Research shows that in many cases, classroom instruction is changing to better match the content found on high-stakes tests. Also, instruction focuses on test content or test-taking skills and ignores subject areas that are not on the test. High-stakes tests limit the scope of the classroom instruction and student learning in undesirable ways (Stacker & Barron, as cited in Abrams *et al*, 2003)
- In a study by Cankoy and Tut (2005), one group of fourth grade students spent 70% of class time on test-taking skills, a second group spent 50% of class time on test-taking skills, and a third group only spent 30% of class time on test-taking

skills. Test-taking skills included completing test questions from former tests, giving tests for drill, teaching procedures for answering multiple-choice questions, and memorizing rules. The study found that teaching students standard procedures to solve different types of math problems is not an effective approach to teach problem solving. Also, there was no difference in the three groups' performances on non-routine math story problems, and spending more class time on test-taking skills did not affect the non-routine story problem solving. To conclude, this study feels that tests and classroom instruction should emphasize and foster problem-solving skills more so than test-taking skills.

1.2 Research Gaps :

Indian research in education began in 1943 that is more than fifteen years before the distance education programme in the form of correspondence education began in 1962. During the last 48 years of its existence, it has expanded to cover more than 37,36,744 students attending more than hundred Dual Mode Universities and thirteen State Open Universities and one National Open University. Despite this phenomenal expansion, major researches in Distance Education either at the doctoral or in the project form are few in number

Research in distance education can be classified, as micro and macro studies. In another way, they can be classified as simple components as drop out or integrated multi-components studies. On the basis of the analysis of the studies in the various areas as evident from the review earlier, there are concentrations in certain areas like characteristics of distance learners and economics of distance education "In fact, both these areas have been extensively studied. The crucial area of andragogy and pedagogy of distance education were hardly touched. Distance Education has, all over the world, adopted a multi-channel learning format involving print material, PCP, audio, radio, television, interactive television and Internet. There has been no study on the effect of multi-channel learning on distance education. Within the instructional process there are very few studies on electronic media. TV and radio as media of distance education have remained almost unexplored. Similarly, research in other components of instructional processes are few and scanty to derive any significant conclusions about the pedagogy and andragogy in distance education

The studies on learning outcome through distance education and its comparability to the learning outcome in the conventional system are negligible Studies are totally missing on excellence and quality of distance education-what constitute quality and what determines quality in distance education. The number of studies on organization and management of distance education are less Besides, there are open universities and dual mode universities and distance education outfits in the conventional universities vary widely in their organizational structure. Some of them enjoy the status of a faculty (autonomous) Some are in the departmental status under a faculty and yet some others operate as constituent colleges. They vary widely in their academic and financial autonomy. Similarly, these institutions vary very widely in their staff structure. A few of the departments have a large number of staff within the distance education institution e.g. about 100 in the Directorate of Distance Education of Delhi University, some others maintain a skeleton staff e g only one Director in the Directorate of Distance Education, Bombay University drawing totally from other departments of the university

Another related area, relatively unexplored is the staff development in distance education. Although STRIDE in IGNOU as well as some of the directorates of distance education have been conducting staff development programmes, research on the programmes is almost missing Recently Ramanujam (1999) conducted a study on "STRIDE Training Programmes Their Impact on the DOL systems in South Asia" The results are with regard to STRIDE training of academics in IGNOU. Majority respondents were positive to the training programmes but feels that STRIDE should equip itself in terms of leadership, understanding, and strategic planning Secondly the impact of DDE, PGDDE and MADE programmes are found to be useful as these programmes have made the distance educators carry out their tasks effectively though the implementation and delivery mechanism suffer from many weaknesses The third part reveals the impact of STRIDE training on the non teaching staff of IGNOU It was found that training was given earlier to non teaching staff which has been discontinued now The non teaching staff expects STRIDE to develop collaborative and need based training programmes which would contribute to the efficiency of their daily work

Distance learners are a heterogeneous group However, they follow the same curriculum as their counterparts in the conventional courses The heterogeneity in age, occupation, interest, motivation, etc are not reflected in the curriculum development process Open universities have the autonomy of developing curriculum focused on distance learners. The relationship between the curriculum development process and the quality of curriculum is the important area of research

Some of the issues in distance education research are . What are the main research areas in distance education and how have they changed between 2000 to 2008 ? What are the most common research areas and where are there gaps in distance education research ? (Mishra 1998)

Many researches have been conducted on Distance Education but there is a gap where the studies have been taken to its transactional phase relating to the Instructional Effectiveness, Self-Concept and Test Anxiety and the present study giving concentration on that direction to highlight the gap of distance and traditional learners for having better quality

1.3 Statement of the Problem :

A Study of Instructional Effectiveness, Self-Concept and Test Anxiety on Distance and Traditional Learners

1.4 Objectives of the Study :

- To study the Instructional Effectiveness in Distance and Traditional learners.
- To develop a standardized questionnaire regarding Instructional Effectiveness, Test Anxiety and Self-Concept
- To study Test Anxiety and Self-Concept in a Comparative way at P G. Level in Distance and Traditional learners
- To compare Instructional Effectiveness, Test Anxiety and Self-Concept between traditional learners and distance learners graphically
- To compare Instructional Effectiveness, Test Anxiety and Self-Concept in traditional and distance mode with respect to their dimension

1.5 Methodology :

The study is basically descriptive in nature and information is gathered through a standardized questionnaire Methodology is based on survey type of research followed by Graphical analysis and t-test extracting from Instructional Effectiveness, Test Anxiety and Self-Concept questionnaire

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1.6 Population :

The population of this study was the students of masters degree level in general university and distance mode university in West Bengal in a selective approach

1.7 Sampling for the Study :

Selected P. G. departments were used for sampling which is representative of the population having number 600 Here the nature of sampling is purposive type

1.8 Description of the Test :

The test was administrated under normal conditions in familiar classrooms of the students during class hour. Written direction was given through questionnaire. In each question there were selected options of which one was to be chosen

1.9 Nature of the Population :

By population the aggregate or the totality of objects or individual having one or more characteristics in common that are of interest to the researcher and regarding which inferences are to be made in a sampling study. It includes all those people or documents who are proposed to be covered under the scheme of study.

In the present research work, the researcher proposed to select students as population of the study specially for first year M A in Education students under the different universities of West Bengal in traditional and distance mode.

1.10 Nature of Sample :

A sample is a small portion of a population selected for observation and analysis By observing the characteristics of the sample, one can make certain inferences about the characteristics of the population from which it has been drawn

For the present study the researcher collected 600 samples from class M A-1

both from distance and traditional learners through purposive sampling

The researcher selected his sample through purposive sampling The sample was selected with a definite purpose in view and the choice of the sampling units depended entirely on the discretion and judgment of the investigator. In purposive sampling in educational problems, it was enough to select institutions or classrooms where the researcher could administer tests, make an interview according to the need of the researcher more systematically and easily

1.11 Construction of Questionnaire :

To prepare the questionnaire the researcher had gone through the detailed description of review of related studies He had analyzed the three different variables very minutely and consulted with the experts regarding various dimensions and drawbacks of the present study The items of the questionnaire had been prepared on the basis of various information obtained from survey conducted at various university and distance education study centers For each statement, a five point scale was provided to enable the respondents to give their opinion for each statement more objectively. Test Anxiety Scale was prepared with the help of Test Anxiety Questionnaire of Prof V P Sharma, published by NPC of Agra Self-Concept Questionnaire was prepared with the help of Self-Concept Questionnaire of R K Saraswat, published by NPC of Agra and then all the three variables of the questionnaire were locally standardized.

1.11.1 Principles of Preparing Questionnaire :

The questionnaire prepared by the researcher is in the restricted or closed form The items of the questionnaire, i e the statements were prepared with the following principles in view

- The significance of the study was stated clearly
- The researcher had tried to seek information which was not obtained from other resources like books reports, records, etc
- The researcher had tried to make question as short and clear as possible
- The researcher had tried to select each item that covered a single area

- The researcher had tried to avoid double-barreled questions
- The researcher had tried to minimize the double negative questions
- The researcher had tried to define terms that could easily be misinterpreted
- The researcher had tried to provide adequate number of alternatives against each question
- The researcher had tried to give point of reference.
- The researcher had tried to design the question to get a complete response
- The researcher had taken due precaution to make it attractive in nature by properly arranging the items and getting them in clearly printed form

1.11.2 Standardization of the Questionnaire :

To construct and standardize the questionnaire for the student of first year at P. G level and to measure the comparative parameters the researcher standardized the test

1.11.3 Developing Working Concept :

Before the construction of a test, developing of working concept is essential. It includes a detailed set of specification as to the purpose of the test and time, and the cost and recourses at the disposal of the researcher. The nature of the population for which the test is constructed has to be defined. The length of the test, type and nature of the test and method of scoring are some of the basic considerations which are to be planned in advance in this stage. For the present study the researcher tried to develop a working concept before proceeding with his research work

1.11.4 Operational Definitions of the Variables Used in the Study :

Instructional Effectiveness :

On the basis of work by Anderson (1991, 2004), Brophy (2001), Baumert *et al* (2000), NCS (2002) Muijs & Reynolds (2001) and OECD (2003), a strong corroboration of the main characteristics of effective instruction as laid out in the previous sections can be discerned. In addition to this consolidation in the knowledge base there are a few additional newer trends.

- a reconsideration of personal characteristics of effective teachers
- more attention to the teaching of higher order skills, self-regulated learning and "constructivist" approaches
- a strong re-statement of the fact that teaching is about facilitating learning, by considering learning activities and student engagement.

'Instruction is most effective when it is problem-based, activates prior learner knowledge, demonstrates what is to be learned, provides opportunities for guided practice, and encourages integration with everyday life.' (Merrill, 2001).

There are also studies that focus on assessing the transfer of specific aspects of courses For example, Suters, Melear and Hickok (2002) examined the extent to which science teachers used the inquiry method they had been taught in a biology course when they later became classroom teachers

Ormrod (2006) defines learning as "a long-term change in mental representations and associations due to experience".

- Are our efforts in the classroom producing these long-term changes ?
- When students leave our courses, how do we know what stays with them ?
- How can we make our instruction more effective ?

By keeping students at the center of one's classroom, a teacher can encourage and inspire students to seek out knowledge and to strive for understanding at a deeper level Through this process, students see a greater relevance for and a stronger connection to the subject at hand Through student-centered instruction, our students can achieve independent minds and the capacity to make educational decisions and value judgments (Brown, 2008)

Self-concept :

Self-concept is an individual's assessment of his or her status on a single trait or on many human dimensions using societal or personal norms as criteria Selfconcept or self-identity is the mental and conceptual understanding and persistent regard that sentient beings hold for their own existence. In other words, it is the sum total of a being's knowledge and understanding of his or her self Self-concept *as* "The self is something of which we are immediately aware. We think of it as the warm, central private region of out life As such it play a crucial part in our consciousness (a concept broader than self), in our personality (a concept broader than consciousness) and in our organism (a concept broader than personality) Thus it is some kind of core in our being" Allport (1961)

Self-concept as the "Key stone of personality" Cattell (1957)

Self-Concept is the nucleus around which the entire personality structure revolves in its homeostatic process of maintaining consistency and stability within the individual personality'

Test Anxiety :

Test anxiety refers to a complex of physiological and emotional responses to tension or stress resulting from apprehension for upcoming exams

In general, it is an uneasiness or apprehension experienced before, during, or after an examination because of concern, worry, or fear Almost everyone experiences some anxiety But some students find that anxiety interferes with their learning and test taking to such an extent that their grades are seriously affected. Though a minimum level of anxiety can be a powerful motivator, but some student experience test-related anxiety to such a degree that it can lead to poor performance

Anxiety for success-oriented achievements not only in educational deliberations, but also in other fields of life and work, has become the primary requirement of the individuals A proven success depends upon the results on any test anxiety scale examination for assessing educational attainments, but various critical conditions of life in different perspective in general, pose test situation

Application of 'Test Anxiety Scale' functions as a Predictive Measure highlighting the probability of success of failure of the individual However, it is more so, and greatly affected by academicians who are frequently influenced by their test performance

Academic Achievement :

It indicates the level of intellectual ability of an individual It also means brightness in academic subjects This academic brightness is developmental in nature Academic Achievement is usually means achievements at first year P G level students

Academic Achievement has been defined by Kinkas and Khair as Academic Achievement is an aspect of behaviours and an important aspect to students who are engaged in the process of education and since it depends on its degree of effectiveness for maximum performance

1.12 Selection of Tools :

In this study the tools that the researcher selected were questionnaires of Instructional Effectiveness, Self-Concept and Test Anxiety, A questionnaire is a group of items (stimuli) presented in either question or statement form in order to elicit responses from the participants A good questionnaire is very much cautious about its wordings. It should be relevant with reference to the topic, short, simple and clear in construction and devoid of any hints. Any questionnaire provides three types of information –

- Face sheet providing identification
- Census type providing sociological information
- Problem information, 1 e, the questions themselves

However, every questionnaire consists of certain simple instruction provided for the participants A questionnaire may be either open ended or closed type based on the nature of response The nature of administration of questionnaire may be either individual or group

The questionnaire prepared by the researcher were three in numbers mentioned below

- 1) Instructional effectiveness
- 2) Self-Concept
- 3) Test Anxiety

The main objective of the questionnaire was to analyze the student's responses which would be helpful to understand the factors that contribute to Instructional effectiveness, Self-Concept, Test Anxiety in traditional and distance learners
1.13 Hypotheses :

Hypothesis – 1 : There is no significant mean difference regarding Time Management of Instructional Effectiveness between distance and traditional learners

Hypothesis – 2 : There is no significant mean difference regarding Feedback of Instructional Effectiveness between distance and traditional learners

Hypothesis – 3 : There is no significant mean difference regarding Strategy of Instructional Effectiveness between distance and traditional learners

Hypothesis – 4 : There is no significant mean difference regarding Mastery of Subject Matter of Instructional Effectiveness between distance and traditional learners

Hypothesis – **5** : There is no significant mean difference regarding Organization of Instructional Effectiveness between distance and traditional learners

Hypothesis – 6 : There is no significant mean difference regarding Teacher Student Relationship of Instructional Effectiveness between distance and traditional learners

Hypothesis – 7 : There is no significant mean difference regarding Physical dimension of Self-Concept between distance and traditional learners

Hypothesis – 8 : There is no significant mean difference regarding Social dimension of Self-Concept between distance and traditional learners

Hypothesis – 9 : There is no significant mean difference regarding Intellectual dimension of Self-Concept between distance and traditional learners

Hypothesis – 10 : There is no significant mean difference regarding Emotional dimension of Self-Concept between distance and traditional learners

Hypothesis – 11 : There is no significant mean difference regarding Test Anxiety between distance and traditional learners

1.14 Limitations :

The present study combining Instructional Effectiveness, Test Anxiety and Self-Concept are difficult enough to investigate the matter in proper direction Environments are not flexible enough to provide all the information regarding their classes and other information in traditional and also in distance mode Most of the determinants are extracted from different studies available either in internet or the personal experience during survey work. The study is limited within a particular area where the survey has been conducted and survey result is tested hypothetically and through graphical analysis. Other statistical analyses and correlative studies have been limited by the researcher





CHAPTER – II REVIEW OF RELATED STUDIES

2.1 Introduction :

Literature review refers to an extensive, exhaustive and systematic examination of publications relevant to the stated research problem. It acknowledges the strengths and weaknesses of the study

A literature review is a body of text that aims to review the critical points of current knowledge including substantive findings as well as

Theoretical and methodological contributions to a particular topic Literature reviews are secondary sources, and as such, do not report any new or original experimental work

A well-structured literature review is characterized by

- a logical flow of ideas,
- current and relevant references with consistent, appropriate referencing style,
- proper use of terminology and
- an unbiased and comprehensive view of the previous research on the topic

A systematic review is a literature review focused on a research question that tries to identify, appraise, select and synthesize all high quality research evidence relevant to that question Systematic reviews of high-quality randomized controlled trials are crucial to evidence-based medicine. An understanding of systematic reviews and how to implement them in practice is becoming mandatory for all professionals involved in the delivery of health care. Systematic reviews are not limited to medicine and are quite common in other sciences such as psychology, nursing, physical therapy, educational research, sociology and business management

In a P G level students can develop their best. It inculcates those values that will help pupils to become good and responsible citizens, enable them to become involved in their community. It has been sometimes founded that it is useful to hold visioning days, where stake holders are invited to identify future priorities and there are then used to help the senior team set priorities within the improvement plan both in the case of distance mode and traditional learners reflected through their objectives

2.2 Objectives of Distance Education :

- To provide opportunity to those who have missed the opportunity of taking advantage of conventional mode of learning
- To provide equal educational opportunities for higher education through distance mode for a large segment of the population, including those in employment, women (including housewives) and adults who wish to upgrade their education or acquire knowledge in various fields of study
- To provide flexibility with regard to eligibility for enrollment, age of entry, choice of courses, methods of learning, conduct of examinations and operation of the programme
- To complement the programs that existing Universities in the country, in the field of higher learning so as to maintain the highest standards on par with other institutions in the country
- To promote integrity in the country through its policies and programs
- To offer degree courses, diplomas and post graduate programs for the benefit of the working population in various fields and for the benefit of those who wish to enrich their lives by studying subjects of cultural and aesthetic values
- To make provision for research and advancement and dissemination of knowledge
- To serve as a source of continuing education, consultancy and to provide equal access to knowledge and higher education

Distance education is inherent with certain flexibility and allows a distant learner to pursue any degree, anytime, anywhere convenient to the learner

- Flexible in terms of age
- Flexible in terms of study center
- Flexible in terms of time limit
- Flexible in terms of examinations

Against the background of what has already been said above, the educational policies of Unity University College can be summarized as follows

• Satisfy the educational needs of students in scattered communities covering the large geographical areas of the country

- Accelerate the manpower development for the different economic sectors
- Provide educational opportunities for those who have been deprived of education due to various reasons and help them to pursue higher education
- Have a cost-effective programs for large number of students

2.3 Criteria of Instructional Effectiveness :

According to David Ashley, Head Teacher, Prors Wood High School, Manchester, the criteria of instructional effectiveness are as follows ·

Empowering Leadership :

It was common to assume that the cultural atmosphere of a University revolved around the quality of a teacher It is now generally accepted that such a model so dependent on short-term, top-down management, was nonsense However, the head teacher does have a crucial role to play

The key role for a teacher is that of empowerment, creating a culture in which the vast intellect, ability and talent of the staff is not only solved, but fully utilized. If teachers do not make it clear that all staff have the authority to make decisions, to be innovative and creative, then they will assume that they do not If that happens, the vast wealth of knowledge & experience that exists in all schools will remain untapped

Relying on Collaboration :

Choosing the appropriate networks to work with a matter of personal choice and social context. It is useful to work with local academic leaders through local authorities in collaboration. Leadership incentive grants, Excellence in quality practice and so one can develop initiatives that may directly involve students across a locality

Analysis of all the data revealed that the quality of academic institutions are dependent by following factors

- Values-led that is a cultural set up to be developed in a school
- People centered
- Achievement-oriented
- Inwards and outwards facing which is equivalent to intra and inter cultural determinants

- Able to manage a number of ongoing tensions and dilemmas
- All emphasized that the sets of care personal values of the heads were based upon care, equity, high expectations and achievement, which were clear to and shared by the overwhelming majority of the school constituencies and which were the drivers for the life of the school
- All emphasized the importance attached by the heads to monitoring standards in the school, to keeping ahead of the game so that their schools responded rather than reacted to new external demands, testing them against their own standards and minimizing bureaucratic demands on staff
- All spoke of the improvement-oriented collaborative school cultures which the heads promoted, and the emphasis upon continuing professional development Which met both organizational and individual needs ?
- All spoke of the time and care which the heads gave enthusiastically to their work the way in which the heads modeled their values
- The heads themselves were clearly strategic, reflective practitioners, exercising a range of interpersonal & intrapersonal skills, and able to analyse, evaluate, articulate and communicate with a range of agencies locally and nationally
- Ref Effective Leadership, Christopher Day & Alma Harris, School of Education, University of Nottingham

Responsive Classroom Management (Weinstein et al., 2004) :

Diversity of our classrooms, basically stands for cast, class and religion influence causing multicultural competence increasing the difficulties of teachers have with classroom management Definitions and expectations of appropriate behavior are culturally influenced, and conflicts are likely to occur when teachers and students come from different cultural backgrounds ? (Weinstein *et al*, 2004)

So not only do teachers need to be aware and accommodate the learning styles of the different students, but also the classroom management for these students

Five components essential to Instructional effectiveness

- Recognition of one's own either centrism or biases
- Knowledge of student's cultural backgrounds

- Understanding of the broader social economic and political context of our educational system
- Ability and willingness to use culturally appropriate classroom management strategies
- Commitment to building caring classroom communities
- The Dimensions of Multicultural Education for Instructional Effectiveness Application in classrooms and similar settings for better academic achievement (Banks, Wool folk, 1995)

Following points may be considered when we have had a comparison between traditional and distance learners

1) Content Integration : Using examples and content from a variety of cultures To illustrate key concepts, principles, generalizations and theories in their subject areas or disciplines

2) An Equity Pedagogy : Matching teaching styles to student learning styles in order to facilitate the academic achievement of students from diverse racial, cultural and social-class groups

3) An Empowering School Culture and Social Structure : Group and labeling practices, sports participation, and the interaction of the staff and the students across ethnic and racial lines are some of the components that must be that empowers students from all groups

4) Prejudice Reduction : The characteristics of student's attitudes on the basis of socioeconomic status and casteism how they can be modified by teaching

5) The Knowledge Construction Process : Helping students to understand how the implicit assumptions within a discipline influence the ways that knowledge is constructed within it. In order to find out more about the student in one's classroom there one some questions that a teacher could / should ask to get a much clearer picture of the students in his / her classroom –

- Family background and structure
- Education
- Interpersonal relationship styles
- Discipline
- Time and Space
- Religion
- Food
- Health and Hygiene
- History, traditions and holidays

According to Sammons, Hillman & Mortimer (1995), the characteristics that help make a classroom effective are broadly outlined as follows

- 1 Focus on teaching and learning
- 2 Purposeful teaching
- 3 Shared vision and goals
- 4 High expectations of all learners
- 5 Accountability
- 6 Learning communities
- 7 Stimulating and secure learning environment
- 8 Professional leadership

The overarching objective of creating and sustaining effective schools underpins all blueprint strategies and initiatives. This provides all schools in the government school system with a shared purpose. The blueprint reform agenda is a coherent strategy which provides school leadership teams with a range of tools and frame works to make their school effective.

2.4 Study of Self-Concept and Test Anxiety :

Academic Self-Concept, Learning Motivation and Test Anxiety of the underestimated student (Detlef Urhahne, Sheng-Han Chao from University of Munich, Germany, Maria Luise Florineth, Silke Luttenberger and Manuela Paechter from University of Graz, Austria) **Background :** Teachers' judgments of student performance on a standardized achievement test often result in an overestimation of students' abilities. In the majority of cases, a larger group of overestimated students and a smaller group of underestimated students are formed by these judgments

Aims : In this research study, the consequences of the underestimation of students' mathematical performance potential were examined

Sample : Two hundred and thirty-five fourth grade students and their fourteen mathematics teachers took part in the investigation

Method : Students worked on a standardized mathematics achievement test and completed a self-description questionnaire about motivation and affect Teachers estimated each individual student's potential with regard to mathematics test performance as well as students' expectancy for success, level of aspiration, academic self-concept, learning motivation, and test anxiety The differences between teachers' judgments on students' test performance and students' actual performance were used to build groups of underestimated and overestimated students

Results : Underestimated students displayed equal levels of test performance, learning motivation, and level of aspiration in comparison with overestimated students, but had lower expectancy for success, lower academic self-concept, and experienced more test anxiety Teachers expected that underestimated students would receive lower grades on the next mathematics test, believed that students were satisfied with lower grades, and assumed that the students have weaker learning motivation than their overestimated classmates Teachers' judgments of students fulfill different functions First and foremost, they serve to evaluate and grade student achievement Teachers' judgments inform parents and educational counsellors about students' performance in school and about students' potential to achieve high educational goals (Gresham, MacMillan, & Bocian, 1997) Teachers' judgments can also influence their own behaviour in class, as teachers base their instructional decisions about course orientation, grouping students, and selecting teaching materials on personal valuations

(Clark & Peterson, 1986, Shavelson & Stern, 1981) Furthermore, previous studies have shown that classroom learning is more successful when teachers posses high judgment accuracy (Helmke & Schrader, 1987, Weinert & Lingelbach, 1995) Unfortunately, teachers' judgments are not always correct, because they primarily rely on informal assessment instead of standardized examination (Deno, 1992) When teachers are given the task of judging student performance on a standardized achievement test, they tend to overestimate students' abilities (Artelt, Stanat, Schneider, & Schiefele, 2001, Bates & Nettelbeck, 2001, Demaray & Elliott, 1998, Helmke, Hosenfeld, & Schrader, 2004, Hoge, 1983, Hoge & Butcher, 1984) As a result, there is almost always a larger group of overestimated students and a smaller group of underestimated students This study aims to research underestimated students and the consequences that are related to the underestimation of their performance potential It is hypothesized that teacher's underestimation of students not only reflects an incongruity between expected and actual performance, but also has detrimental effects on students' self-concept of ability, learning motivation, and test anxiety Diagnostic competence is the ability of teachers to make accurate judgments of student characteristics (Artelt & Grasel, 2009, Edelenbos & Kubanek-German, 2004, Karing, 2009) Teachers' diagnostic competence is necessary for the appropriate planning, design, and evaluation of instructional processes (Schrader, 2009) and is especially vital when decisions about students' academic or vocational career have to be made (Van Ophuysen, 2006, Trautwein & Baeriswyl, 2007) In recent years, a growing interest in research on teachers' diagnostic competence can be seen (Artelt & Grasel, 2009) More experimental, domain-specific, and longitudinal research studies will allow knowledge to be gained about conditions, specificity, and temporal stability of teachers' diagnostic accuracy (Hinnant, O'Brien, & Ghazarian, 2009, Krolak-Schwerdt, Bohmer, & Grasel, 2009, Lorenz & Artelt, 2009, Sudkamp & Moller, 2009, Sudkamp, Moller & Pohlmann, 2008)

Diagnostic competence can be assessed by asking teachers to predict how many items of a standardized achievement test each student in the class is likely to solve The relation between teachers' predicted test scores and students' actual performance constitutes a measure of assessment accuracy Instead of standardized achievement tests, curriculum-based measures can be used as an alternative to assess teachers' diagnostic competence (Feinberg & Shapiro, 2003, 2009, Hamilton & Shinn, 2003, Madelaine & Wheldall, 2005)

Different measurement methods have been established to investigate the accuracy of teachers' judgments Direct measures ask teachers to specifically estimate students' performance on a standardized test. For example, this could be the number of items that each student in a class is expected to solve in an achievement test (Helmke & Schrader, 1987)

Indirect measures, in contrast, make use of a rating scale, which is easier to handle but reduces the variety of response options (Begeny, Eckert, Montarello & Storie, 2008)

Another example of distinctively different measurements can be seen with peer dependent measures, in which teachers are asked to judge students in comparison to their classmates, or peer-independent measures, which involve no reference to others There are no general advantages of direct or indirect, peer-dependent or -independent measures

Hoge and Coladarci (1989) found in their meta-analysis that the median correlation of studies employing peer-dependent measures was 0.64, whereas the median correlation of peer-independent measures was 0.68 More coarse indirect measures with a median correlation of 0.62 led to comparable accuracy of teacher judgment than finer direct measures, whose median correlation was 0.69 (Hoge & Coladarci, 1989)

Newer investigations in the field corroborate these findings (Begeny *et al*, 2008, Eckert, Dunn, Codding, Begeny & Kleinmann, 2006)

Teachers' diagnostic competence can be evaluated by making use of different measures such as a rank component, a level component, and a differentiation component (Schrader & Helmke, 1987, Spinath, 2005)

The rank component shows how much the teacher can accurately predict the ranking of students with respect to measures like achievement, motivation, or intelligence. The rank component can simply be calculated by means of Pearson correlation between teacher judgment and student characteristic (Schrader & Helmke,

1987) It is the most widely used statistical method to examine teachers' diagnostic competence (Madelaine & Wheldall, 2005) The level component measures how much the teacher tends to overestimate or underestimate student characteristics. The level component results from the difference between the teacher's judgment and the student's judgment. Research shows that teachers have a general tendency to overestimate the achievement level of school classes (Bates & Nettelbeck, 2001, Begeny *et al*, 2008, Demaray & Elliott, 1998, Hamilton & Shinn, 2003, Helmke *et al*, 2004) The differentiation component illustrates how much the teacher is prone to overestimate or underestimate the variance of student characteristics.

The differentiation component is seldom reported, but research results by Schrader and Helmke (1987) indicate there is an overestimation of achievement variability In general, teachers can make fairly accurate judgments of their students on the rank component

The agreement between teacher assessment and student performance is relatively high Demaray and Elliott (1998), for example, found for a sample of first to fourth graders that the correlation between teachers' judgments on a rating scale and students' academic achievement on a standardized test was 0 70 This and other similar findings suggest that teachers could quite accurately judge students' academic performance (Hoge & Coladarci, 1989)

However, not every teacher is a good diagnostician of students' academic achievement Helmke and Schrader (1987) report that the rank component in their investigation of 32 mathematics teachers revealed a median of 0 67, but the distribution of correlations ranged from 0 03 to 0 90 At the moment, it is still unclear whether demographic factors can explain the individual differences among teachers (Hurwitz, Elliott, & Braden, 2007) Neither teaching experience nor level of education is reliably related to teachers' diagnostic competence (Demaray & Elliott, 1998, Impara & Plake, 1998)

The accuracy of teacher judgment in the motivational-affective area has been scarcely investigated (Karing, 2009) In general, the correlations are smaller than in the achievement area Teachers can predict explicit categories of academic achievement like test grades better than abstract concepts like academic self-concept, learning motivation, test anxiety, or negative mood of students (Ambady & Gray, 2002, Auger, 2004, Givvin, 1964, Detlef Urhahne *et al*, Stipek, Salmon, & MacGyvers, 2001, Helmke & Fend, 1982, Schrader, 2006, Spinath, 2005) Marsh and Craven (1991), for example, report correlations between 0 39 and 0 62 for different academic self-concepts. A newer investigation in elementary schools (Praetorius, Greb, Dickh auser, & Lipowsky, 2010) yielded rank components of 0 55 for mathematical self-concept, 0.52 for reading self-concept and 0 25 for writing self-concept

A longitudinal study by Givvin *et al* (2001) analysed not only teacher-student agreement on perceived ability but also learning orientation. At the beginning and end of the school year, stable but small correlations between teacher and student judgment of around 30 emerged for both dimensions. The difficulty teachers experience judging student motivation is even greater when they attempt to correctly assess students' test anxiety levels. Helmke and Fend (1982) could not find any substantial correlations between teacher judgment and students' test anxiety. Silbereisen, Reynolds, and Richmond (1986) reported only a weak correlation of 0.21 between teacher judgment and the manifest anxiety of the elementary school students. Spinath (2005) has done an encompassing investigation on students' motivational affective traits, which served as a basis for this study.

The author used self-report measures to investigate the academic self-concept, learning motivation, and test anxiety of 723 elementary school children. The class teachers were asked to estimate academic self-concept, learning enjoyment, and school anxiety on single items for each student in comparison to other students of the same age. The rank components suggest moderate accuracy for estimating academic self-concept (r = 0.39) but low accuracy for judging learning motivation (r = 0.20) and test anxiety (r = 0.15).

The research study focused on the differences between overestimated and underestimated students and examined the consequences of teachers' misjudgments Four hypotheses relating teacher judgments to student characteristics were formulated and tested H_1 There are more students whose test performance is overestimated than students whose test performance is underestimated

Rationale Teachers tend to overestimate student performance on standardized achievement tests (Artelt *et al*, 2001, Bates & Nettelbeck, 2001, Begeny *et al*, 2008, Demaray & Elliott, 1998, Helmke *et al*, 2004, Hoge & Butcher, 1984) It might be that teachers assess students' competence rather than their performance and have more confidence in their abilities than justified

 H_2 Teachers can judge student performance accurately but have difficulties estimating students' learning motivation, academic self-concept, and test anxiety *Rationale* In general, the correlations between teacher judgment and student performance are fairly high (Hoge & Coladarci, 1989) Spinath (2005) has shown, however, that correlations between teacher judgment and student perception for academic self-concept, learning motivation, and test anxiety are considerably lower

 H_3 . Underestimated students exhibit lower learning motivation, lower academic selfconcept, and more test anxiety than overestimated students

Rationale In achievement situations, underestimated students have a lesser chance of obtaining equally high grades in comparison with overestimated students. Teachers do not reward the learning efforts of underestimated students in the same way as they do the efforts of overestimated students. As a consequence, underestimated students reduce their learning efforts. When teachers' positively reinforcing behaviour is missing, learning motivation and academic self-concept of underestimated students will decrease, and test anxiety will rise.

 H_4 Teachers misjudge underestimated and overestimated students not only on test performance but also on learning motivation, academic self-concept, and test anxiety *Rationale* Teachers' judgments of students' test performance is key (Jussim & Eccles, 1992) Teachers are at the risk of making exaggerated judgments of students' characteristics in other domains based only on students' academic achievement, which can be explained by a Halo effect (Thorndike, 1920) If teachers judge students as low achievers, they may intuitively assume that these students possess lower motivation, lower self-concept, and higher test anxiety

The academic self-concept are different between the student groups, whereby underestimated students are not judged as favourable as overestimated ones Teachers' judgments about student learning motivation and their mastery goal orientation are related to each other The main effect (F(1, 233) = 471, p < 05, partial $_2 = 02$) and more importantly, the interaction are both significant (F(1, 233) = 1 14, p < 001, partial 2 = 05) The outcome of the ANOVA is in line with Hypothesis 4 Whereas teachers accurately judge learning motivation of the overestimated students, a discrepancy to the disadvantage of the underestimated students appears The teachers describe the underestimated student group as less motivated, despite the fact that they stated the same learning motivation as the overestimated students For test anxiety, the main effect, which lacks explanatory power due to the standardization of data, is not significant (F(1, 233) = 0 93, ns, partial 2 = 00) Moreover, the interaction effect is insignificant (F(1, 233) = 2.24, ns, partial 2 = 01) Teachers do not perceive any differences between student groups In fact, the differences between underestimated and overestimated students in test anxiety are too small to show significance with the ANOVA

This study investigated the accuracy of teachers' judgments on students' academic performance and motivational-affective traits Findings indicate that teachers overestimated student performance on a standardized mathematics achievement test Teachers judged the rank order of student test performance and the expected grades for the next mathematics test quite accurately, but had difficulties in estimating students' level of aspiration, learning motivation, and test anxiety Further comparisons concentrated on the distinction between underestimated and overestimated students They reveal that both student groups performed on the same level, but underestimated students showed lower expectancy for success, lower academic self-concept, and more test anxiety The teachers were able to correctly judge concepts related to student achievement They accurately predicted that underestimated students expect lower grades on their next mathematics test and hold a lower academic self-concept than overestimated students However, teachers misjudged concepts related to student motivation.

learning motivation and a lower level of aspiration for the underestimated students than what was actually true This study replicated some of the important findings of the accuracy of teacher judgment

Howard Miller, Associate Professor of Education at Lincoln University, has established 12 steps for the beginning of the year to help teachers promote effective Institutional management These are as follows for enhancing traditional and distance learners

- Develop a set of written expectations you can live with and enforce
- Be consistent Be consistent Be consistent
- Be patient with yourself and with your students
- Make parents your allies Call early & often Use the word "concerned" When communicating a concern, be specific & descriptive
- Don't talk too much Use the first 15 minutes of class for lectures or presentations, then get the kids working
- Break the class period into two or three different activities Be sure each activity segues smoothly into the next
- Begin at the very beginning of each class period and end at the very end
- Don't roll call Take the roll with your seating chart while students are working
- Keep all students actively involved For example, while a student does a presentation, involve the other students in evaluating it
- Discipline individual students quietly and privately Never engage in a disciplinary conversation across the room
- Keep your sense of perspective and your sense of humor
- Know when to ask for help

A number of researchers like Stern, Stein and Bloom (1956), Warburton (1961) have found that personality factors are related to academic achievement. For the last few decades a substantial amount of literature is available relating personality factors to academic achievement and the aspects of personality which have generally been taken into consideration are emotional instability, neuroticism, persistence, self-sufficiency dominance, self-confidence, frustration, test anxiety and introversion-

extrovers10n

A great deal of emphasis is now laid on the study of self-concept and test anxiety of individuals for understanding and predicting many aspects of their behaviour. Self-concept is considered as one of the dominating factors influencing the behaviour of an individual Successes and other pleasurable events in life lead to enhancement of self-concept, while failures, frustration and other denigrating experiences tend to lower it Self-concept plays a vital role in human life 'as every one continuously strives towards self-realization, self-actualization and self-enhancement' In view of the significance of self-concept as determinant of the behaviour of an individual, its study has gained importance in recent years Self-concept of creative children scientists, industrial workers, artists and students have been studied by a number of researchers Studies conducted by Eisk (1966), Dukes (1965), Teisberg and Springer (1961) and Pegue (1965) on school children found significant positive relationship between certain factors of creativity and their self-concept

The word 'self' has been used in many different ways. There are, however, two, which are in predominant use the self as subject or agent the self as the individual who is known to himself. The word 'Self-Concept' has come into common use to refer to the second meaning. According to Combs and Snygg (1959)' concepts of self are those more or less perceptions of self which the individuals regards as part or characteristics of his being. Each individual has had literally hundreds of thousands of more or less discrete perception of self. This myriad of self perceptions do not exist in the perceptual field as mere enumeration of ways of seeing one's self. Rather, the concept of self which an individual processes is an organization. This organization of all the ways in individual has of seeing himself is called phenomenal self or the perceived self.

Self-concept is one of the most dominating factors influencing the individual behaviour. The behaviour of a person at any time, therefore, depends to a large extent on the concept he has of himself and of the situation. Self-concept not only influences behaviour but is itself altered and restructured by behaviour and unsatisfied needs

An individual's own opinion regarding his worth as a person influences much of his thinking and his classroom activities Regardless of how in accurate or distorted

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an individual self-evaluation may be, he perceives and reacts to others in terms of how he / she perceives and evaluates himself / herself. The self-concept of an individual, therefore determines his interpersonal relationship with his fellow classmates

Cole David A. & Martin Joan M (1999) conducted a longitudinal study of gender differences, depression and anxiety of over and under estimated children in their academic competence and observed that symptoms of depression and anxiety were negatively associated with academic over-estimation. Further, controlling for depression and anxiety eliminated most of the gender differences in academic over and under estimation, result also revealed that self-reported depression and anxiety predicted changes in the tendency to overestimate academic competence over time, however the reverse relation was estimated to be much weaker

Rabian Brain, Embry, Leanne & Danial (1999) examined the construct Behavioural validation o the childhood Anxiety Sensitivity Index (CASI) and demonstrated that CASI was a significant predictor of the degree of State Anxiety and Subjective fear reported in response to the challenge task, even after controlling for pre-task levels of anxiety and fear respectively. The CASI predicted changes in fear experienced in response to the challenge task. The findings tend to support to the validity of the CASI in pre-adolescent pupils. As such, the CASI possesses unique clinical utility relative to measure of Trait-Anxiety Rolbers, Clandia, M and Schreider (1999) studied self-concept and anxiety among immigrant elementary school children in Germany and found that migration did not lead to a decrease of self-concept or to an increase to general anxiety, however, the immigrant did differ in their self-concept in German language as well as in test anxiety from the nonimmigrant SS

Test anxiety is the consequential effect of the gap that exists or is being visualized to exist between the judgment score and the performance score. In a Test Anxiety situation, it is generated as a consequence of the difference between the expectancy score and the valence, i.e. the achievement score. When they perceive lacing behind in their target before, during or after the examination, they develop test anxiety. Test anxiety as such actualizes the pupils, particularly high-achievers, over-achievers, high n Ach pupils to make up their perceived achievement deficiency that

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might occur because of some reason or other It infuses boosting effect in the goal attainment process Test Anxiety therefore, functions as an intrinsic motivator to the examinees in their Goal Attainment Process in reaching the educational target

As such, test anxiety is an important component of our personality and is closely associated with severe personality, disturbances and concomitant difficulties in the teaching process

The above discussion has, therefore, indicated the necessity of studying adolescent's self-concept, and test anxiety as an important variables that may have significant relationship with their academic achievement

Self-concept is perhaps the single most important attribute and the key to understanding the behaviour of an individual. There has been a great deal of research into the nature of the relationship between self-concept and academic achievement during the past quarter of a century. In that time self-concept has assumed a significant place in both psychology and education. The interest of the psychologist is to study the self-concept as the determinant of one educational behaviour. Most of the present day educationist and psychologist concur that an individual's self-concept is a critical facet of his personality. Hence the importance of the role of self-concept as a determinant of human behaviour and its acceptance as a concise measure of personality is increasingly realized.

The sharp increase in the number of research studies on self-concept and allied non-cognitive variables since 1960 has been described as being in line with the current concern in education with enhancing the child's self-concept. Consequently, the fundamental responsibility of schools towards improving self-concept of their students is being recognized today (Clark 1963, Marston 1968, Tannenaban 1972) According to Shavelson Hubner and Stanton (1976), the construct of self-concept is linked with achievement and "whether used as an outcome itself or as a moderator variable that helps explain achievement outcomes, is a critical variable in education and in educational evaluation and research"

Broadly speaking, self-concept is a person's total subjective environment and a distinctive center of experience and significance, which results from the evolutional interaction with others becoming the consistent personal perspective of 'I' and 'Me'

(Jersild Telford & Sawrey, 1975) It includes (i) cognitive components (an individual's perception of his physical attributes and self-conception of himself, his abilities, purposes, beliefs, moral commitments, and values), (ii) affective components (feelings, sentiments, moods), (iii) capacity for self-evaluation (approval or disapproval) and (iv) attitudinal components All these components react with each other in a complex manner in different situations to give uniqueness and direction to human personality and behaviour

And the emerging millennium with alarming scientific achievements, challenging technological advancements revolutionized communicative and excellence prescribe high order need for achievement in the world of competition Both 'Zeigarnic Effect' as well as 'Test Anxiety' seem to be the essential demand characteristics of the emerging 21st century Anxiety for success-oriented achievements not only in educational deliberations, but also in other fields of life and work, has become the primary requirement of the individuals Warding off 'Fear of Failure' and promoting 'Hopes of Success' have become the need of the day and a proven success depends upon the results on any Text Anxiety Scale Examinations for assessing educational attainments, no doubt, provide test situation in particular, but various critical conditions of life in different perspectives in general, pose test situations Application of 'Test Anxiety Scale' functions as a predictive measure highlighting the probability of success of failure of the individual As such, the test situation is experienced by almost all members of our society, however, it is more so, and greatly affected by academicians who are frequently influenced by their test performance We live in a 'Test Taking and Test Conscious' culture

As such, test anxiety is an important component of our personality, and is closely associated with severe personality disturbances and concomitant difficulties in the teaching learning process. No student took place to measure the combined effects of self-concept and test anxiety on academic achievement. So there is a gap in the research problem. To bridge the gap the researcher consider self-concept and test anxiety as independent variables and academic achievement is dependent variable. So the title of the study "A Study of Self-Concept, Test Anxiety and Academic Achievement among Adolescence" Following determinants stated by Pennsylvania State University are adapted for Managing the to initiate the academic institution in a right way

- 1 Start class on time, sending a message that being there is important. If a student arrives late several days in a row, say something before it becomes a habit. If it does become a habit, take further action.
- 2 End class on time If you begin letting students out early, they will begin routinely packing up their backpacks before class is over, if you go over time on a regular basis your students will become resentful
- 3. Announce your office hours and keep them faithfully Being accessible can prevent many problems If students know you are there for them they may be more willing to come to class and participate because they know help is available
- 4. Set policies at the beginning of the course In particular, make sure attendance and grading policies are clear, preferably in writing Don't stray from these policies or students may see you as a pushover
- 5 Be conscious of signs of racial or sepals' harassment, whether by you, towards you, or towards other members of the class Make it clear by your words and actions that put-downs or derogatory comments about any groups for whatever reason are simply not acceptable
- 6 Refer students with psychological, emotional, academic, or financial trouble to the appropriate counselors You can be sympathetic and supportive, but becoming a student's counselor can cause problems
- 7 When acting as a teaching assistant, involve yourself only to the extent that you are expected to be involved If the professor you are assisting is in charge of determining grades and you receive complaints about grades, have the students deal with the professor Do not foster a "me against you" attitude, and do not side with the students against the professor

2.5 Focus on Instructional Strategies in Traditional System :

Effective schools are focused primarily on teaching and learning They carefully consider time spent on academic and non-academic learning Effective schools deploy their resources strategically to enhance teaching and learning Professional learning activities & programmes are aimed at improving the teachinglearning relationship, paying particular attention to developing the subject and pedagogical knowledge of teachers

Forming answers to the following questions may help to provide a focus on teaching and learning

- How well does our school manage the time spent on physical, personal and social learning, discipline-based learning and interdisciplinary learning ?
- Identify one or two strategies that were implemented in the school to bring about improvement in the teaching-learning relationship. Analyse how effective the strategies have been
- How well does our school manage the workload of staff, in particular the balance between time focused on teaching and learning and time spent on administrative tasks ?

Benefits Student Ratings and Achievement can have for an Institution Intended Instruction (Ory, 2001):

- 1 Instructors value the input and make improvements in their teaching
- 2 Instructors are rewarded for having excellent ratings
- 3 Instructors with very low ratings are encouraged to seek help.
- 4 Students perceive and use ratings as a way to suggest improvements in teaching
- 5 Students have more information on which to make their course selections
- 6. Ratings motivate instructors to improve teaching
- 7 Students see ratings as a vehicle for change

Unintended Consequences Ratings can have on an Institution (Ory, 2001) :

- 1 Instructors after their teaching to get higher ratings including weakening the difficulty of the course or giving higher grades
- 2 Poor teaching is accepted and overall standards are lowered
- 3 Campus uses ratings as only measure of effectiveness out of convenience.
- 4 The content of the student rating form may drive what is taught
- 5 Students reward poor teaching by giving high ratings in exchange for high grades

- 6 Ratings are used to make discriminations between instructors that are not supported by other data
- 7 Instructors after administration of evaluation to get higher ratings

Optimal Conditions for Students give Instructors Feedback (Svincki, 2001) :

- Students need adequate notice of when they will be asked to give feedback This will allow for time to think about the questions that will be asked Ideally students would be informed a day ahead of time that an evaluation will be done so they can take some time to think about the learning experience and be prepared to give precise and meaningful feedback to the instructor
- Students need adequate instruction on how to give the feedback Students need instruction in how to be precise in their comments and in the definitions of the terms being used in the evaluation Also students should be informed on how instructors plan to respond to the feedback that the students give
- One way to assist students in becoming more precise is to share a sample of student responses from previous evaluations that were helpful in improving the learning experience
- Another way is to ask for informal feedback at various times throughout the semester (every four weeks is a good timetable) to a few important questions about the learning experience. Share the responses anonymously with the class asking for classification of responses that were vague or too general and demonstrating how the more precise the students are, the more valuable the feedback becomes
- Let students give feedback on a regular basis throughout the semester Assign a few students in the class to be administrators and summarizers of this feedback process. This can improve the rapport with the students and increase the trust among the students and the instructor leading the students willingness to be more thoughtful, honest and precise with their feedback on the final evaluation.
- Students need adequate time to give the feedback Instructors need to be willing to take class time to get meaningful feedback. Ratings forms should not be given out at the end of the class period as students may tend to hurry so they can leave

Areas in which Students are Knowledgeable to share Feedback with Faculty :

There recommendations are based on a synthesis of the many studies that were reviewed and not based on the findings on any one researcher There are no specific recommendations for what might be used on a ratings form but rather a list of the areas in which students have the experience and knowledge to give feedback

Traditional learners have better opportunity than distance learners on the basis of contact hours

Students can Determine :

- If the learning objectives set out in the syllabus for the class have been covered by the instructor
- If they are getting regular is timely feedback from the instructor on their learning progress
- If the instructor let the class go early and how often this action occurred
- If the instructor cancelled class and how often it occurred
- If the instructor made it clear as to the time period in which students would receive their assignments and tests back and kept to it
- If the material that was questioned on the tests was identified by the instructor as being the responsibilities of the students to know for the test
- If the professor was on time for the class each day and how often he/she was late
- If the professor was available for help outside of class time
- If the professor kept to the timeframe announced to students that would be used to return students' phone calls or emails
- If the teacher provided a clear explanation for the grades that were assigned to all work and tests
- If the instructor spoke clearly and could be easily understood
- If the professor was willing to answer students' question during class or provided other opportunities for the questions to be answered.
- If the teacher offered regular encouragement to the students to do well
- If the teacher sought students' input on issues that directly impacted their learning (discussion guidelines, assessment methods, paper or project topics as examples)

- If the professor made it clear why (or gave the learning purpose) students were to do the assignments give both in and outside of class
- If the teacher kept the classroom environment positive for learning (did not allow sleeping, talking, doing other work, phone calls etc.)
- If the professor knew the names of the students
- If the textbook or other supplementary material was helpful in their learning of the course material
- If the professor provided a clear set of learning objectives, or goals, or purposive statements etc for each class around which students could organize the information they received in the class
- If the pace of the class was reasonable for them individually
- If the professor kept to the rules, policies, and guidelines outlined in the syllabus

Areas in which Students have Limited Qualifications to give Faculty Feedback :

Most of the students lack the expertise needed to comment on

- If the teaching methods used were appropriate for the course
- if the content covered was appropriate for the course
- 1f the content covered was up to date
- if the motivational methods used were appropriate to the level and content of the course
- If the assignments were appropriate for aiding student learning
- If what they leaned has real world application
- If what they learned will help them in future classes
- If the type of assistance, help or support given to students was appropriate to the learning goals of the class
- 1f the difficulty level of the course material was at an appropriate level
- If the course or the instructor was excellent, average or poor unless given a rubric to use in making this judgment

2.6 Comparative Study :

Research conclusions about student ratings for having a positive institutional

culture for traditional and distance mode

- Training is necessary who will use the ratings information to make decisions about a teacher's performance (Centra, 1993, March, 1987, Murray 1994)
- Besides Students' ratings Peer review, self-evaluation, teaching portfolios, and student achievement should also be used as determinates of intra-cultural activity (Seldin, 1999, Doyle 1983, Centre, 1993)
- Administration of ratings forms must be uniform and standardized to keep the playing field level (Cashin, 1999)
- Meaningful feedback and will need opportunities to practice giving feedback for then ratings to become more effective for the faculty (Bandura, 1996)
- Students must be assumed that the information they are giving is welcomed by the faculty and will be used to improve the teaching & unlikely to take the rating process seriously (Peterson, Maier & Seligman, 1993)
- A minimum percentage of students depending upon the size at the class must be present to do the ratings for the information to be considered representative and reliable (Franklin & Theall, 1991)
- Students need definitions of terms used in the ratings questions especially what the institution means by teaching effectiveness Research has shown wide interpretations of meanings of even common terms like timeliness, dependable, (Slagle & Icenogle, 2001)
- Institutions must carefully define those areas in which students are capable of giving feedback to faculty and those that are beyond their expertise (Ory, 2001)
- The lack of preciseness of any ratings instrument needs to be considered in the interpretation of any results Rating averages likely fall in a range two to three tenths of a point m either direction 4 2 may represent a range from 3 9–4 2 (Payle, 1993)
- Students must not fear retribution based on their feedback, or it will significantly inhibit their willingness to be honest in their feedback (Gordon & Strucher, 1992)

Suggestions for improving the effectiveness of using a student ratings form Based on the research findings the following recommendations are being made for improving the use of teacher effectiveness evaluation .

- Faculty need to continually assure students throughout the semester that the ratings will be used by the faculty for productive change and that there will be no chance of retribution to the students
- Faculty need to help educate students in effective ways of giving precise feedback that addresses specific aspects of their learning experience
- Faculty need to give students multiple informal opportunities to give feedback throughout the semester, thus practicing their feedback skills. This is also an effective way to improve teaching practice
- To define key vocabulary words for students that are used in both the formal ratings questionnaires and that they may use in written comments much words include effectiveness, dependable, organized reasonable, interesting, excellent, and caring, among others
- The university community needs to make certain rating questionnaires are administered in standardized ways including the time of semester and time of class (beginning of the class) and never during final exam week etc
- Ratings questions need to be limited to those areas in which students have adequate expertise to give meaningful feedback
- Those persons interpreting the results of student ratings should be given assistance on how to use the data, its reliability, validity and factors that many impact the results, including the number of students present the day of rating, whether it's an elective or required curse, the type of course and the experience of the faculty member, among other issues
- To assure faculty that ratings data will be collected over revered classes
- Those persons interpreting the results need to compare the results with other measures of teaching effectiveness including peer ratings, self-ratings, teaching portfolios, student learning and alumni ratings before nay conclusions are drawn about the ratings' information
- Faculty need to be assured that ratings are a formative method of evaluation and that assistance to improve their teaching will be made available to them

• If a summative use of ratings is to be used it should be the result of multiple courses over several semesters and the intended use of the findings should be made clear to all faculty

Review of the related literature means to locate, to read and to evaluate the past as well as current works literature of research concerned with the planned investigation. It gives the researcher an understanding of the research methodology which refers to the way of the study is to be conducted. It helps the researcher to know about the tools and instruments, which proved to be useful and promising in the previous studies. In this study, review was restricted within the available research findings due to the limited time.

An overview of the earlier study is conducted in the field of education and selfconcept, test anxiety and academic achievement among adolescence students. In this study, an attempt has been made to find out the impact of academic achievement, selfconcept and test anxiety.

Thus review of related studies in the area has been proved to be an essential part of research work. The investigator presents his acquaintance with some of the related studies as review.

Chakraborty (KU, 1984-85) : A cross-sectional study of the test anxiety and general anxiety of the students and their impact on school achievement. The major objectives of the study were 1) To determine the extent of test anxiety and general anxiety scores of the children reading in class VIII 11) To find out significant differences if might be any in the test anxiety scores and the general anxiety scores of the students of class VIII 111) To determine the relationship between the aggregate scores in school performance of the students and the test anxiety scores and the general anxiety scores taken separately. The major hypotheses of the study were H_1 . The girls would show superiority in the test anxiety over the boys, H_2 . The boys would show superiority in the general anxiety and the aggregate scores of the student. The major findings of the study were 1) The boys would show superiority in general anxiety over the girl, H_3 .

superiority in the test anxiety over the rural students was rejected

Podder Manas (1998) : Study of self-concept in relationship to behavioural problems of adolescence The major objectives of the study were 1) Whether there is any sex difference between real and ideal self-concept of school going adolescence ii) Compare the behavioral problems of children with high middle and low discrepancies in their ideal and real self-concept The major hypotheses of the study were : H_1 . Whether there is any sex difference between real and ideal self-concept of school going children H_2 Is there any difference of behavioral problems of children with high, middle and low discrepancies in their ideal and real self-concept major hypotheses of children with high, middle and low discrepancies in their ideal and real self-concept. The major findings of the study were 1) The result of ideal self-concept was high and level of real self-concept 11) The middle group faces more problem then high and low group in health and physical development

Ghosh (2001) : Self-Concept and Adjustment as Factors in Academic Achievement. The major objectives of the Study were · 1) To measure the self-concept of secondary (class-IX) student. ii) To find out the relationship between (a) Self-Concept and academic achievement (b) between academic achievement and patterns of adjustment and (c) between patterns of adjustment and self-concept The major hypotheses of the study were H_1 . There is a significant relationship between scholastic achievement and self-concept of the pupils under consideration H_2 There is a significant relationship between self-concept and home adjustment of the pupils under consideration H_3 There is a significant relationship between scholastic achievement and health adjustment of the pupils under consideration. The major findings of the study were 1) The exists positive relationship between self-concept and achievement and the adolescence with good self-concept are likely to achieve more than those with poor self-concept ii) There is strong relationship between selfconcept and home adjustment iii) Since high scores on this adjustment inventory indicate maladjustment or poor adjustment it can be said that low self-concept group is poor in adjustment as compared with high self-concept group

Gahan (2000) : A study on the relationship between self-concept and Academic achievement of junior high school students in Orissa. The major objectives of the study were 1) findings out relationship between self-Concept of junior high school students in Orissa and their academic achievement 11) studying the relationship between academic self-concept and academic achievement. The major hypothesis of the study were H_1 . Self-concept of male students are significantly related with their academic achievement. H_2 Academic self-concepts of junior high school students are significantly related with the nature of their academic achievement. The major findings of the study were 1) gender difference was significant in case of high achievement but not in case of low achievers 11) academic self-concept was positively and significantly related with the low achievement

Chandra (2003-2004) : A study on the relationship between academic achievement and manifest anxiety of secondary school students The major objectives of the study were i) to find out the relationship between the two variables 11) to determine how high achievers differ form low achievers on the criterion of manifest anxiety The major hypotheses of the study were H_1 There is a significant relationship between academic achievement and manifest anxiety of the sample under consideration. H_2 . High achievers differs from low achievers on the criterion of manifest anxiety. The major findings of the study were : 1) the co-efficient of correlation between the scores of academic achievement in science (X variable) and the scores of manifest anxiety (Y variable) was found to be 0.29 which for 0 = 98 was not significant at 0.05 level of significant (P > 0.05). Thus the hypothesis H_1 is rejected 11) From the above stated result it is evident that pupils having high achievement scores in anxiety differ significantly form the pupils having low achievement scores in anxiety on the criterion of manifest anxiety (1 = 15 23 df = 38), P > 0.05) So the hypothesis H₂ is retained

Roy (2004) : A study on general anxiety of the students and its impact on school achievement. The major objectives of the study were 1) to find out significant differences, if might be any in the general anxiety scores of the student of class VIII ii) to determine the relationships between the aggregate scores in school performance of the students and the general anxiety scores taken separately. The major hypotheses of the study were : H_1 . There would be negative correlation between the scores in general anxiety and the aggregate school achievement scores of the student H_2 . Scores in the academic achievement of the students might be predicted from their

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scores in general anxiety The major findings of the study were 1) there would be negative correlation between the scores in general anxiety and academic achievement of the students was neglected 11) the scores in the academic achievement of the students might be predicted from their scores in the general anxiety questionnaire was accepted

Thilagarathi, T. (1990) : Studied on Academic Achievement in relation to intelligence creativity and Anxiety Major objectives of the study were 1) to find out the relationship between academic achievement and intelligence creativity and anxiety and 11) to find out the intelligence, creativity and anxiety to high average and low achievement The major findings of the study The high achievers belonged to the low-level anxiety group and low achievers belonged to the high-level anxiety group Anxiety had only a negative influence on academic achievement

Malik (1978) : A study of self discloser, self-acceptance and anxiety among college students The major objectives of the study to investigate the relationship between self discloser, self-acceptance and anxiety The major findings of the study Self-discloser had no significant relationship with anxiety, while self-acceptance had a negative relationship with anxiety among college students

Gupta (1979) in his study of anxiety and achievement motivation in relation to academic achievement, sex and economic state use, finds that 1) in the case of boys there are negative relationship between anxiety and achievement motivation and 11) students having higher academic achievement show lower level of anxiety

Pandit (1969) works on "The role of the Anxiety in learning academic achievement of children Hypothesis is that and overall negative relationship exists between anxiety and other independent variables 145 boys of grade-V from Delhi elementary school have been taken as sample, the CIE group's test of intelligence (11-12) and the adoption of four anxiety scale (MAS, GASC, TASC & AASC) have been used Beside there the important findings are 1) anxiety bears a negative relationship with learning and academic achievement and 11) subjects having less anxiety are found a superior in learning and achievement irrespective of the task difficulty to those having more anxiety

Krishnan (1993) studied on relationship between self-concept and academic

achievement of college students and found a significant relationship between the two Another interesting finding was that there was no sex-effect however, arts and science groups different in their self-concept

K. L. Bhatia (1974) studies on the role of anxiety in learning and academic achievement of children His purpose is to study the role of anxiety in academic learning and achievement of school boys of grade-V He finds that i) anxiety bore a negative relationship with learning and academic achievement, ii) subjects having less anxiety were found superior in learning and achievement, iii) high learns and high achiever was more anxious than low achievers and iv) anxiety interfered with the relation of learning

N. Chaudhary (1974) studies the relationship between Achievement Motivation and Anxiety He finds that i) the correlation between new achievement and test anxiety scores was negative and not significant and ii) girls had higher new achievement score

Speilberger in his study of anxiety in college students finds that the very brightest students having high anxiety obtain slightly higher grades than those who are low anxious the students with less ability having high anxiety tend to obtain lower grades than those who are low anxious

Vasantha (1972) found that 1) positive relationship existed between selfconcept and achievement (r=0 43) and between self-concept and intelligence (r = 0 11), 11) high and low achievers could be differentiated no their self-concept scores They could also be differentiated within drawn from the sub-samples as boys girls forward community Urban and rural students small and big size families and ordinal position in the family and 111) low and high achievers classified on residential are a community and family size could be differentiated on self-concept scores

Ramkumar found that high intelligence group had negative correlation with self-concept while the low intelligence group had a positive correlation Again the correlation between self-concept and achievement shows that for high achievers an increase in self-concept is associated with an increase in achievement while for low achievers high self-concepts tend to depreciated achievement. While for low achievers higher self-concepts tend to depreciate achievement. This implies that self-concept which is related to intelligence is promoting higher achievement

It was hypothesis by **Mehata** that negative (undesirable) aspect of the selfconcept would be more characteristic of under achievers than of achievers and positive aspects of the self-concept would be more characteristic of achievers than of under achievers The two groups were found to differ on a number of aspects of the Self-concept and achievers by positive aspect

Deo and Bhullar found that no relationship exists between self-concept and intelligence and self-concept and achievement

Bhatnagar found that low achievement in case of students had its genesis in how they view themselves Strong educational leadership, emphasis on the acquiring of basic skills, an orderly and secure environment, high expectations of pupil attainment and frequent assessment of pupil progress

In the literature this is sometimes identified as the 'five-factor model of school effectiveness' It should be mentioned that effective schools research has been largely carried out for primary schools, while at the same time studies have been conducted mostly in inner cities and in predominantly working-class neighborhoods. In more recent contributions, effective-schools research has been integrated with education production function and instructional effectiveness research, this meaning that a mixture of antecedent conditions has been included Studies have evolved from comparative case studies to surveys, and conceptual and analytical multi-level modeling has been used to analyze and interpret the results Numerous reviews on school effectiveness have been published since the late seventies Examples are Purkey and Smith (1983) and Ralph & Fennessey (1983) More recent reviews are those by Levine and Lezotte (1990), Scheerens (1992), Creemers (1994), Reynolds et al (1993), Sammons et al (1995) and Cotton (1995) The focal point of the reviews is the question of 'what works', typically the reviews give lists of effectivenessenhancing conditions There is fairly wide consensus in the reviews on the main categories of variables to be distinguished as effectiveness-enhancing conditions, even when one compares earlier with more recent reviews which summarizes the characteristics listed in the reviews by Purkey & Smith (1983), Scheerens (1992), Levine & Lezotte (1990), Sammons et al (1995) and Cotton (1995)

2.7 Components of Instructional Effectiveness :

The effectiveness-enhancing components of Instructional Effectiveness are as follows

Factors Components Achievement :

- Clear focus on the mastering of basic subjects orientation
- High expectations (school level) high expectations
- High expectations (teacher level)
- Records on pupils' achievement.

Educational Leadership :

- General leadership skills
- School leader as information provider
- Orchestrator or participative decision-making.
- School leader as coordinator
- Meta-controller of classroom processes
- Time spent on educational and administrative leadership.
- Counsellor and quality controller of classroom teachers
- Initiator and facilitator of staff professionalization consensus
- Types and frequency of meetings and consultations cohesion among staff
- Contents of cooperation.
- Satisfaction about co-operation
- Importance attributed to co-operation
- Indicators of successful co-operation

Curriculum Quality :

- Setting curricular priorities opportunity to learn
- Choice of methods and textbooks
- Application of methods and textbooks
- Opportunity to learn
- Satisfaction with the curriculum

School Climate :

(a) Orderly Atmosphere :

- The importance given to an orderly climate
- Rules and regulations
- Punishment and reward
- Absenteeism and drop-out.
- Good conduct and behaviour of pupils
- Satisfaction with orderly school climate
- (b) Climate in terms of Effectiveness Orientation and Good Internal Relationships :
- Priorities in an effectiveness-enhancing school climate
- Perceptions on effectiveness-enhancing conditions
- Relationships between pupils
- Relationships between teacher and pupils
- Relationships between staff
- Relationships the role of the head teacher
- Pupils' engagement
- Appraisal of roles and tasks.
- Job appraisal in terms of facilities, conditions of labour, task load and general satisfaction
- facilities and building.

Evaluative Potential :

- Evaluation emphasis
- Monitoring pupils' progress
- Use of pupil monitoring systems
- School process evaluation
- Use of evaluation results
- Keeping records on pupils' performance
- Satisfaction with evaluation activities
Parental Involvement :

- Emphasis on parental involvement in school policy
- Contact with parents
- Satisfaction with parental involvement.

Classroom Climate :

- Relationships within the classroom
- Order
- Work attitude
- Satisfaction.

Effective Learning Time :

- Importance of effective learning
- Time
- Monitoring of absenteeism
- Time at school.
- Time at classroom level.
- Classroom management
- Homework

2.8 Studies on Instructional Effectiveness :

The most relevant strands of research concerning teaching and classroom processes for the topic at hand are studies on characteristics of effective teachers, and studies that go under the label of 'process product studies'. This latter category of studies was also inspired by Carroll's (1963) model of teaching and learning and off-shoots of this model, such as the models of 'mastery learning' (Bloom, 1976) and 'direct teaching' (e g Doyle, 1985). The research results have been reviewed by, amongst others, Stallings (1985), Brophy & Good (1986) and Creamers (1994), and quantitatively synthesized in meta-analyses by Walberg (1984), Fraseer *et al* (1987) and Wang, Haertel & Walberg (1993) These latter authors have also included in their analyses variables from outside the classroom situation, such as the student's

relationships with peers, and the home environment (e g television viewing), which they put under the heading of 'educational productivity'

Research : A Review of the Evidence from Developed and Developing Countries

In the sixties and seventies the effectiveness of certain personal characteristics of teachers was given particular attention. Medley & Mitzel (1963), Rosenshine & Furst (1973) and Gage (1965) are among those who reviewed the research findings From these, it emerged that there was hardly any consistency found between personal characteristics of the teacher such as warm-heartedness or inflexibility on the one hand, and pupil achievement on the other When studying teaching styles (Davies, 1972), the behavioural repertoire of teachers was generally looked at more than the deeply-rooted aspects of their personality Within the framework of 'research on teaching', there followed a period during which much attention was paid to observing teacher behaviour during lessons The results of these observations, however, seldom revealed a link with pupil performance (Lortie, 1973) In a subsequent phase, more explicit attention was given to the relationship between observed teacher behaviour and pupil achievement This research has been identified in the literature as 'processproduct studies'. Variables which emerged 'strongly' in the various studies were the following (Weeda, 1986)

- clarity clear presentation adapted to suit the cognitive level of pupils,
- flexibility varying teaching behaviour and teaching aids, organizing different activities etc ,
- enthusiasm expressed in verbal and non-verbal behavior of the teacher,
- task related and / or businesslike behavior directing the pupils to complete tasks, duties, exercises etc in a businesslike manner,
- criticism much negative criticism has a negative effect on pupil achievement,
- indirect activity taking up ideas, accepting pupils' feelings and stimulating individual activity,
- providing the pupils with an opportunity to learn criterion material that is to say, a clear correspondence between what is taught in class and what is tested in examinations and assessments,

- making use of stimulating comments directing the thinking of pupils to the question, summarizing a discussion, indicating the beginning or end of a lesson, emphasizing certain features of the course material and
- varying the level of both cognitive questions and cognitive interaction.

In later studies effective teaching time became a central factor The theoretical starting points of this can be traced back to Carroll's teaching learning model (Carroll, 1963). Chief aspects of this model are :

- actual net learning time which is seen as a result of perseverance and opportunity to learn and
- necessary net learning time as a result of pupil aptitude, quality of education and pupil ability to understand instruction

The mastery learning model formulated by Bloom (1976) was largely inspired by Carroll's model, and the same goes for the concept of 'direct teaching'. Doyle (1985) looked at the effectiveness of direct teaching, which he defined as follows for Intra Cultural determinants ·

- teaching goals are clearly formulated;
- The course material to be followed is carefully split into learning tasks and placed in sequence,
- the teacher explains clearly what the pupils must learn;
- the teacher regularly asks questions to gauge what progress pupils are making and whether they have understood,
- pupils have ample time to practice what has been taught, with much use being made of 'prompts' and feedback,
- skills are taught until mastery of them is automatic,
- the teacher regularly tests the pupils and calls on them to be accountable for their work.

The question of whether this type of highly structured teaching works equally well for acquiring complicated cognitive processes in secondary education as for mastering basic skills at the primary-school level has been answered in the affirmative (Brophy & Good, 1986) Yet in such settings, progress through the subject matter can be taken with larger steps, testing need not be so frequent and there should be space left for applying problem-solving strategies flexibly Doyle (1986) emphasized the importance of varying the learning tasks and of creating intellectually challenging learning situations. These can be produced through an evaluative climate in the classroom, where risk-taking is encouraged, even with complicated tasks. In the domain of classroom organization, Bangert, Kulik and Kulik's meta-analysis (1983) revealed that individualized teaching in secondary education hardly led to higher achievement and had no influence whatsoever on factors such as self-esteem and attitudes of pupils 'Best-evidence-syntheses' by Slavin (1996) indicated a significantly positive effect of co-operative learning at the primary school level Metaanalyses by Walberg (1984) and Fraser *et al* (1987) found the most significant effects for the following teaching conditions

- reinforcement;
- special programmes for gifted children,
- structured learning of reading,
- cues and feedback,
- mastery learning of physics and
- working together in small groups.

It should be noted that recently developed cognitive and, in particular, constructivist perspectives challenge the on learning and instruction, behaviouristically-oriented approach and results of the process-product research tradition (Duffy & Jonassen, 1992, Brophy, 1996) According to the constructivist approach, independent learning, meta-cognition (e.g. learning to learn), 'active learning', learning to model the behavior of experts ('cognitive apprenticeship') and learning from real-life situations ('situated cognition') should be emphasized, although the effectiveness of teaching and learning according to these principles has not yet been firmly established Authors who have addressed this issue (Scheerens, 1994, De Jong & Van Joolingen, 1998), however, point out that a straightforward comparison with more structured teaching approaches may be complicated, since constructivist teaching emphasizes different, higher order, cognitive objectives Moreover, structured versus 'active' and 'open' teaching is probably better conceived

as a continuum of different mixes of structured and 'open' aspects, rather than as a dichotomy

2.9 Integration of the Study :

Of the five effectiveness-oriented educational research types that were reviewed, two focused on 'material' school characteristics (such as teacher salaries, building facilities and teacher / pupil ratio) The results were rather disappointing in that no substantial positive correlations of these material investments and educational achievement could be established in a consistent way across individual studies On the basis of more recent studies these rather pessimistic conclusions have been challenged, although methodological criticism indicates that the earlier pessimistic conclusions are more realistic In-depth process studies connected with large-scale evaluations of compensatory programmes have pointed out that programmes using direct, 1 e structured, teaching approaches were superior to more 'open' approaches The research movement known as research on exemplary effective schools (or effective-schools research) focused more on the internal functioning of schools than the earlier tradition of input-output studies. These studies produced evidence that factors such as strong educational leadership, emphasis on basic skills, an orderly and secure climate, high expectations of pupil achievement and frequent assessment of pupil progress were indicative of effectiveness Research results in the field of instructional effectiveness are centered around three major factors effective learning time, structured teaching and opportunity to learn in the sense of a close alignment between items taught and items tested. Although all kinds of nuances and specificities should be taken into account when interpreting these general results, they appear to be fairly robust - as far as educational setting and type of students are concerned The overall message is that an emphasis on basic subjects, an achievement-oriented orientation, an orderly school environment and structured teaching, which includes frequent assessment of progress, is effective in the attainment of learning results in the basic school subjects

General Characteristics of Five Types of Effectiveness Research Independent Dependent Discipline :

- (Un)equal Socio-economic Attainment Sociology Survey opportunities status and IQ of pupil, material school characteristics
- Production Material School Achievement Economics Survey functions characteristics level
- Evaluation of Specific Achievement Interdisciplinary Quasi-experiment compensatory curricula level pedagogy programmes
- Effective 'Process' Achievement Interdisciplinary Case study schools characteristics level pedagogy of schools.
- Effective Characteristics Achievement Educational Experiment instruction of teachers, level psychology, observation instruction, class organization

In recent institutional-effectiveness studies these various approaches to educational effectiveness have been integrated, namely in their conceptual modelling and choice of variables At the technical level, multi-level analysis has contributed significantly to this development. In contributions to the conceptual modelling of school effectiveness, schools have been depicted as a set of 'nested layers' (Purkey & Smith, 1983), where the central assumption is that higher organizational levels facilitate effectiveness-enhancing conditions at lower levels (Scheerens & Creemers, In this way, a synthesis between production functions, instructional 1989) effectiveness and school effectiveness has become possible. This is accomplished by including the key variables from each tradition, each at the appropriate 'layer' or level of school functioning (the school environment, the level of school organization and management, the classroom level and the level of the individual student) Conceptual models developed according to this integrative perspective include those by Scheerens (1990), Creemers (1994) and Stringfield & Slavin (1992) Since the Scheerens model is used as the basis for the meta-analyses described in subsequent sections, it is shown in Figure 3

2.9.1 An Integrated Model of Institutional Effectiveness on the basis of Instructional Effectiveness (Scheerens, 1990) :

Context:

- Achievement stimulants from higher administrative level
- Development of educational consumerism
- 'Covariables', such as school size, student-body composition, school category, urban / rural

Inputs:

- Teacher experience
- Per-pupil expenditure
- Parent support.

Outputs :

Student achievement, adjusted for ·

- previous achievement.
- intelligence
- SES

Institution Level :

- Degree of a achievement-oriented policy
- Educational leadership
- Consensus, co-operative planning of teachers
- Quality of school curricula in terms of content covered and formal structure
- Orderly atmosphere
- Evaluative potential

Process :

The choice of variables in this model is supported by the 'review of reviews' on school-effectiveness research that will be presented in the next section Exemplary cases of integrative, multi-level school-effectiveness studies are those by Mortimore *et al* (1988), Brandsma (1993), Hill *et al* (1995), Sammons *et al* (1995) and Grisay (1996)

An interesting set of suggestions developed by Fuller and Clarke in their interpretation of the research evidence, involves paying more attention to cultural contingencies when studying school effectiveness in developing countries. Such contingencies might help to explain why certain school and classroom-level variables 'work' in one country but not in the next. They have distinguished four broad categories of cultural conditions.

- the local level of family demand for schooling,
- the school organization's capacity to respond to family demand "while offering forms of knowledge that are foreign to the community's indigenous knowledge" (Fuller and Clarke, 1994),
- the teacher's capacity and preferences in his or her use of instructional tools and
- the degree of concurrence between the teacher's pedagogical behavior and local norms regarding adult authority, didactic instruction and social participation within the school (Fuller and Clarke, 1994)

These ideas, as well as the necessity of overcoming other weaknesses of school-effectiveness studies (lack of cost benefit analyses, shortage of longitudinally designed studies), have demanding implications for the design of studies According to Riddell (1997), Fuller and Clarke fail to present clear research alternatives With a review of 12 more recent effectiveness studies carried out in developing countries, Scheerens (1999) has reconfirmed the predominance of the production function approach with a restatement of the importance of equipment, particularly textbooks, and the human resource factor (teacher training) According to the author, instructional and pedagogical theory appear to be practically missing as a source of inspiration for educational effectiveness studies in developing countries. In the four studies that did look into some school organizational and instructional variables, the impact of these variables was relatively low. This limited review of 12 studies confirms the results of an earlier review by Anderson, Ryan and Shapiro (1989), who stated that "variations in teaching practice in developing countries are only rarely found to be associated with variations in students' learning" Cultural contingencies, as referred to by Fuller and Clarke, or lack of variation in teaching practices in some developing countries, could be offered as hypothetical explanations for these

outcomes Scope and limitations of the school-effectiveness model for educational planners Although the integrated model of school effectiveness is comprehensive in that it encompasses input, process, output and context conditions and recognizes the multi-level structure of education systems, it has a number of limitations

- The model focuses on the level of the individual school, and does not address important issues concerning the proper functioning of national education systems, I shall refer to this as the aggregation limitation When subsidiary 2 is applied and schools are autonomous, this limitation is counterbalanced to a degree, since, by definition, the school has more formal responsibilities
- The model has a strongly instrumental focus, treating educational goals and objectives as largely 'given' Extending the model according to the larger perspective of organizational effectiveness, as briefly referred to in Part I, can partly compensate for this limitation by taking into account the responsiveness of the school when faced with changing environmental constraints Again, it depends on the pattern of functional decentralization in an education system to what extent adaptation mechanisms at school level are important in comparison with provision at the macro level We will refer to this limitation as the instrumentality limitation
- Although the model allows for the inclusion of questions of equity and efficiency, actual research practice has not lived up to expectations in this area. Moreover, the way school-effectiveness research deals with these issues is also determined by two other limitations level of aggregation and instrumentality. The argument is that, particularly in developing countries, these issues deserve to be dealt with from a broader perspective than that of the school effectiveness model. This limitation will be referred to as the relatively narrow quality orientation. Aggregation limitations As indicated in Figure 3, which shows an 'integrated' model, school effectiveness is seen as including malleable conditions are situated at the school level. This focus may perhaps also be seen as a limitation of empirical school-effectiveness research. The component that includes contextual conditions is less well developed. This component concentrates on contextual conditions that can be linked to stimulation of achievement orientation at school.

level Examples are the setting of achievement standards and the stimulation of educational consumerism. The practice of reporting school performance through public media, links both. So 'standard setting' and stimulating accountability, by introducing evaluation and feedback mechanisms, are measures that should be included in the 'integrated' school-effectiveness model. Clearly this is not all that national educational planners can do to stimulate the overall quality of schooling. Other major issues include .

- privatization and decentralization;
- creating vertical coordination between levels of schooling (e.g. in the sense of ISCED levels);

Effectiveness and Perspective on Planning in Distance and Traditional Mode : The Rationality Paradigm :

From the review of effectiveness research and the integration of these research results within models, as depicted, it is clear that malleable conditions can be distinguished at various aggregation levels. Popularly stated, these lists of malleable conditions refer to 'what works' in education. The question is expanded to explore the principles behind 'why' the identified factors appear to work. This brings us to the realm of theories on planning, management and organizational functioning, and basic principles that could explain effective, task oriented behaviour in social systems. Here, the rationality paradigm has been chosen as the framework for the discussion of planning models and the ways in which these can be related to the findings of empirical both in traditional and distance education. The rationality paradigm lies at the heart of theories on planning and public policy-making. The basic principles of the rationality paradigm are

- goal-oriented behaviour,
- optimal choice between alternative means to reach given goals,
- recognizing that the alignment of individual preferences and organizational goals is a major issue in organizational settings. An important distinction has to do with the question of whether goals are considered as 'given' to the social planner or designer, or whether the process of choosing particular goals is seen as part of the

planning process. In the first case the approach is 'instrumental', whereas the term 'substantial rationality' (Morgan, 1986) is sometimes used for the latter Stated more popularly, the instrumental approach is inherent in the phrase 'doing things right' whereas the substantial perspective asks the additional question of 'doing the right things' In general terms, the model that is implicitly used in school effectiveness research fits the economic rationality model quite well Economic rationality applies the rationality paradigm to the organization's production process, and is therefore also frequently referred to as the productivity model The basic means-to-end relationships considered in the productivity model are situated in the 'primary' or work process of the organization This is also the case of economically-oriented research on 'education production functions' (Monk, 1992), as well as of educational productivity schemes that largely depend on research into teaching and learning environments (Walberg, 1984)

Usually, in effectiveness research, the instrumental interpretation of the rationality paradigm is implicitly chosen, since basic competences to be acquired by pupils are usually considered as the given criteria for evaluation of effectiveness. Three of these principles will be discussed and can be labelled as follows

- 'plan synoptically and structure formally',
- 'align individual and organizational goals by creating market conditions',
- 'plan retroactively by means of proper evaluation and feedback'
- a careful arrangement of subject matter, creating sequences in a way that intermediate and ultimate objectives are approached systematically,
- alignment of teaching methods (design of didactical situations) to subject-matter segments and
- monitoring of the learning progress of students, preferably by means of objective tests.

As stated before, given the orientation towards the primary process, inherent in economic rationality, the synoptic planning approach in education applies most of all to curriculum planning, design of textbooks, instructional design and preparation of (series of) lessons

2.10 Distance Mode Vs Traditional Mode :

Effective Distance Education :

Without exception, effective distance education programs begin with careful planning and a focused understanding of course requirements and student needs Appropriate technology can only be selected once these elements are understood in detail. There is no mystery to the way effective distance education programs develop They don't happen spontaneously; they evolve through the hard work and dedicated efforts of many individuals and organizations. In fact, successful distance education programs rely on the consistent and integrated efforts of students, faculty, facilitators, support staff and administrators.

Key Players in Distance Education :

The following briefly describes the roles of these key players in the distance education enterprise and the challenges they face

Students : Meeting the instructional needs of students is the cornerstone of every effective distance education program and the test by which all efforts in the field are judged Regardless of the educational context, the primary role of the student is to learn This is a daunting task under the best of circumstances, requiring motivation, planning, and an ability to analyze and apply the instructional content being taught When instruction is delivered at a distance, additional challenges result because students are often separated from others sharing their backgrounds and interests, have few if any opportunities to interact with teachers outside of class and must rely on technical linkages to bridge the gap separating class participants.

Faculty : The success of any distance education effort rests squarely on the shoulders of the faculty In a traditional classroom setting, the instructor's responsibility includes assembling course content and developing an understanding of student needs. Special challenges confront those teaching at a distance For example, the instructor must

- develop an understanding of the characteristics and needs of distant students with little first-hand experience and limited, if any, face-to-face contact,
- adapt teaching styles taking into consideration the needs and expectations of multiple, often diverse, audiences,

- develop a working understanding of delivery technology, while remaining focused on their teaching role and
- function effectively as a skilled facilitator as well as content provider

Facilitators : The instructor often finds it beneficial to rely on a site facilitator to act as a bridge between the students and the instructor. To be effective, a facilitator must understand the students being served and the instructor's expectations. Most importantly, the facilitator must be willing to follow the directive established by the teacher. Where budget and logistics permit, the role of on-site facilitators has increased even in classes in which they have little, if any, content expertise. At a minimum, they set up equipment, collect assignments, proctor tests, and act as the instructor's on-site eyes and ears

Support Staff : These individuals are the silent heroes of the distance education enterprise and ensure that the myriad details required for program success are dealt with effectively Most successful distance education programs consolidate support service functions to include student registration, materials duplication and distribution, textbook ordering, securing of copyright clearances, facilities scheduling, processing grade reports, managing technical resources, etc. Support personnel are truly the glue that keeps the distance education effort together and on track

Administrators : Although administrators are typically influential in planning an institution's distance education program, they often lose contact or relinquish control to technical managers once the program is operational Effective distance education administrators are more than idea people. They are consensus builders, decision makers, and referees They work closely with technical and support service personnel, ensuring that technological resources are effectively deployed to further the institution's academic mission Most importantly, they maintain an academic focus, realizing that meeting the instructional needs of distant students is their ultimate responsibility

Distance Learning : An Effective Educational Delivery System

In recent years, researchers have studied the effectiveness of distance learning and its delivery methods Willis (1994) contended that researchers have attempted to study distance learning effectiveness by exploring variables such as student demographics, motivation, attrition, cognitive style, gender, and achievement Esserman and Williams (1987) conducted a study exploring the comparative effectiveness of distance and traditionally delivered instruction which also agreed with Willis's variables. In the study, they concluded that distance-delivered instruction could be as effective as traditional instruction if the delivery methods were based on the background and experience level of the students. The content examples should be relevant to individual learners' experiential and cultural background In a similar study by Omoregie and Jackson (1996), variables such as age, gender, environment, educational level, experience, computer usage, graphic presentations, and video presentations were used to determine the effectiveness of a distance learning course The study revealed that learner environment and life-time experience have an important role in the planning and organization of an effective distance learning delivery system

Garrison (1990) examined the impact to the learner in audio teleconferencing and found that dialogue, negotiation, and validation of knowledge must be used in order for this tool to be a successful educational delivery method Willis (1994) claimed that the success of distance learning relies on the key players — students, faculty, facilitators, support staff and administration

Finally, research suggests that the effectiveness of distance learning is based on preparation, educators' understanding the needs of learners and instructors' understanding of the target population and their instructional needs rather than excessive attention to innovation and the delivery systems.

The Impact of Planning and Organizing Instructional Materials :

The planning and organizing of instructional materials for distance education have increased the effectiveness of the delivery process Instructors who are involved in distance education spend about a semester before the actual transmission to prepare instructional materials for their courses (Omoregie & Jackson, 1996). When an instructor spends this much time for researching, planning, and organizing, the instructional process becomes strengthened. Some distance learning instructors use of graphics, video tapes and printed materials during their lecture to illustrate content area. Distance learning can also utilize face-to-face instruction with technological tools such as compressed video and computer desktop video conferencing

While some critics argue that face-to-face instructional process has more credibility than distance education, due to time students spend with instructors after lecture, traditional classroom instructors sometimes deliver lectures without notes or instructional materials based strictly on the length of time allowed for teaching the course.

Impact of Technological Tools and Software Packages :

The rapid growth of computer and fax machine usage in schools has increased long-distance communication between faculty and students (Mackwood, 1994) Students can now communicate with their instructors by the use of electronic mail and fax New computers are manufactured to include audio/visual communication hardware and software packages Mackwood also claimed that computers have become the preferred long-distance communication tool in distance education

Audio / visual equipment and technology tools such as multimedia computer, television, VCR, laser disc player, telephone, digital camera, LCD panel, Quick Cam, and PC / MAC TV Converter have changed the instructional process in classrooms across the nation. Instructors and students who use these tools have better chances of teaching and learning effectively than those with less technology (Morse, 1991)

Companies such as Microsoft, Corel and Roger Wagner have revolutionized the software market by including incredible presentation packages with a variety of functions for classroom instruction Packages such as PowerPoint, Harvard Graphics, and Corel applications are used for creating innovative presentations for classroom instruction. HyperCard and Hyper Studio software packages allow the instructor to create their own multimedia projects and presentations which have added another dimension to the instructional process Computer graphics, electronic print,

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multimedia software applications, presentation software applications and electronic mail utilized in distance education make communications and learning easier (Verduin & Clark, 1991)

Finally, the declining cost of computing equipment, more available software applications and telecommunications tools have allowed student access to college and university campuses for interactive conferences with their instructors. Computer networks on university campuses are making it possible for distance and traditional students to gain immediate access to the university's resource centers and the libraries. The overall result from the rapid growth of various modern technological tools is the increased effectiveness of education.

2.11 The Impact of Faculty Development :

The learner and instructor are the most important factors in distance learning As the needs of the learner are considered in the planning and organizing stages, faculty needs are also considered Faculty development remains a critical issue for distance learning to be a successful delivery method Willis (1994) suggested that for the success of distance education, "Teachers and administrators must work together on identifying and resolving the issues, policies, and biases that inhabit systematic use of distance education meeting academic goals"

Research suggests that distance education preparation should include faculty in-service training, staff support, and administration Faculty in-service training should include hands-on experience for preparing tests, videos, and graphic instructional materials for the course In-service training should include the use of technology in the classroom such as telecommunications, and computing equipment Training should also include techniques for managing distance learning and understanding the unique need of learners Support staff also plays an important role in the success of distance learning An office should be created to support the instructor in preparing instructional materials for the learner. Support staff can also play the role of a facilitator or a technical person who makes sure that the equipment is in working order Finally, the administrator and instructor must actively work to ensure a quality distance learning program. In doing this, they must identify and resolve faculty development issues that might affect the success of the distance learning delivery process

The study revealed that distance learning can be an effective instructional academic delivery system for adult learners if all the key players are involved in the process Researchers found improved modern technology tools and software application packages to have also played a significant role in the effectiveness of distance education Research suggests that there are no significant differences between distance and traditionally delivered instruction Research also suggests that variables such as student demographics, motivation, attrition, cognitive style, gender, and achievement play a significant role in distance learning Finally, faculty development has an important role in the effectiveness of distance learning

2.12 The Strengths and Weaknesses of Distance Education :

Distance learning, like any kind of learning, can serve different ends, but distance learning appears mainly to serve those who cannot or do not want to make use of classroom teaching Demanding professional commitments and family responsibilities of many adults often make attending a conventional, full-time, face-toface course with fixed timetables a rather unrealistic proposition, and the reasons why adults choose distance education are primarily "the convenience, flexibility and adaptability of this mode of education to suit individual students' needs" (Holmberg, 1989)

All learning requires a degree of motivation, self-discipline, and independence on behalf of the learner, but these aspects are arguably more pertinent in the case of distance learning, where the student is largely self-directed and unsupervised, and expected to be more autonomous Threlkeld and Brzoska (1994) state that "maturity, high motivation levels, and self-discipline have been shown to be necessary characteristics of successful, satisfied students" One of the main foci of this study is what factors contribute to this notion of "successful, satisfied students"

Distance study is self-study, but the student is not alone As Holmberg (1989) describes it, "A kind of conversation in the form of two-way traffic occurs through the written or otherwise mediated interaction between the students and the tutors and

others belonging to the supporting institution" Holmberg goes on to state that, "conversation is brought about by the presentation of the study matter if this is characterized by a personal approach and causes the students to discuss the contents with themselves" Such a development can be brought about by a readable style of presentation The issue of course materials is directly relevant to the current study, and the dialogic approach to materials will be examined in more detail later in the paper

Kırkup and Jones (1996) believe that the success of distance learning courses "cannot be assumed". Sharp cut-off dates for tutor-marked assignments, rigidity of learning content and materials, and inflexible learning structures are all common in distance education systems (Keegan, 1990), and are factors which clearly will not meet the needs of all learners. Kirkup and Jones (1996) summarise the most significant weaknesses of distance education as (a) its inability to offer dialogue in the way that conventional face-to-face education does, (b) the inflexibility of its content and study method and (c) the isolation and individualization of the student.

2.13 Distance vs. Traditional Education :

Research indicates that the instructional format itself (e.g., interactive video vs videotape vs "live" instructor) has little effect on student achievement as long as the delivery technology is appropriate to the content being offered and all participants have access to the same technology Other conclusions drawn from this line of research suggest ·

- Achievement on various tests administered by course instructors tends to be higher for distant as opposed to traditional students (Souder, 1993), yet no significant difference in positive attitudes toward course material is apparent between distant and traditional education (Martin & Rainey, 1993).
- Conventional instruction is perceived to be better organized and more clearly presented than distance education (Egan *et al*, 1991).
- The organization and reflection needed to effectively teach at a distance often improves an instructor's traditional teaching
- Future research should focus on the critical factor in determining student achievement the design of instruction itself (Whittington, 1987)

Why are Students Successful ?

Research suggests distant students bring basic characteristics to their learning experience which influence their success in coursework Distance education students

- are voluntarily seeking further education,
- have post-secondary education goals with expectations for higher grades (Schlosser & Anderson, 1994),
- are highly motivated and self-disciplined and
- are older

Studies also conclude that similar factors determine successful learning whether the students are distant or traditional. These factors include

- willingness to initiate calls to instructors for assistance,
- possessing a more serious attitude toward the courses,
- employment in a field where career advances can be readily "achieved through academic upgrading in a distance education environment" (Ross & Powell, 1990) and
- previous completion of a college degree (Bernt & Bugbee, 1993)

Why is Instruction Successful ?

Good distance teaching practices are fundamentally identical to good traditional teaching practices and "those factors which influence good instruction may be generally universal across different environments and populations" (Wilkes & Burnham, 1991) Because distance education and its technologies require extensive planning and preparation, distance educators must consider the following in order to improve their effectiveness (Schlosser & Anderson, 1994)

- Extensive pre-planning and formative evaluation is necessary Teachers cannot "wing it" Distance learners value instructors who are well prepared and organized (Egan *et al*, 1991)
- Learners benefit significantly from a well-designed syllabus and presentation outlines (Egan *et al*, 1991) Structured note taking, using tools such as interactive study guides, and the use of visuals and graphics as part of the syllabus and presentation outlines contribute to student understanding of the course However,

these visuals must be tailored to the characteristics of the medium and to the characteristics of the students

• Teachers must be properly trained both in the use of equipment and in those techniques proven effective in the distance education environment Learners get more from the courses when the instructor seems comfortable with the technology, maintains eye contact with the camera, repeats questions, and possesses a sense of humor (Egan *et al*, 1991)

How Important is Interaction ?

Many distant learners require support and guidance to make the most of their distance learning experiences (Threlkeld & Brzoska, 1994) This support typically takes the form of some combination of student-instructor and student-student interaction

Research findings on the need for interaction have produced some important guidelines for instructors organizing courses for distant students

- Learners value timely feedback regarding course assignments, exams, and projects (Egan *et al*, 1991)
- Learners benefit significantly from their involvement in small learning groups These groups provide support and encouragement along with extra feedback on course assignments Most importantly, the groups foster the feeling that if help is needed it is readily available
- Learners are more motivated if they are in frequent contact with the instructor More structured contact might be utilized as a motivational tool (Coldeway *et al*, 1980)
- Utilization of on-site facilitators who develop a personal rapport with students and who are familiar with equipment and other course materials increases student satisfaction with courses (Burge & Howard, 1990)
- The use of technologies such as fax machines, computers, and telephones can also provide learner support and interaction opportunities

Cost vs. Benefits :

When establishing a distance education program, one of the first things considered is the cost of the system Several cost components factor into the design of a distance education system (Threlkeld & Brzoska, 1994)

- Technology: Hardware (eg, videotape players, cameras) and software (eg, computer programs).
- **Transmission :** The on-going expense of leasing transmission access (e g, T-1, satellite, microwave)
- Maintenance : Repairing and updating equipment
- Infrastructure : The foundational network and telecommunications infrastructure located at the originating and receiving campuses
- **Production :** Technological and personnel support required to develop and adapt teaching materials
- Support : Miscellaneous expenses needed to ensure the system works successfully including administrative costs, registration, advising / counseling, local support costs, facilities and overhead costs
- Personnel : To staff all functions previously described

Although the costs of offering distance education courses may be high, there are high costs associated with offering conventional courses Benefits of distance education courses to the learner include (Ludlow, 1994)

- Accessible training to students in rural areas
- Students may complete their course of study without suffering the loss of salary due to relocation
- Students are exposed to the expertise of the most qualified faculty
- Perhaps the question institutions must answer is whether it is part of their mission as educators to offer programs to those who might not be reached without distance education. The primary benefit to educational institutions through distance education may be the increased number of non-traditional students they are able to attract and serve Research also suggests that as programs become more efficient, program costs should decrease (Ludlow, 1994)

The Need for Instructional Development :

Instructional development provides a process and framework for systematically planning, developing, and adapting instruction based on identifiable learner needs and content requirements. This process is essential in distance education, where the instructor and students may share limited common background and typically have minimal face-to-face contact. Although instructional development models and processes abound (Dick & Carey, 1990; Gustafson & Powell, 1991), the majority follow the same basic stages of design, development, evaluation, and revision

2.14 The Instructional Development Process :

Design:

- Determine need
- Analyze audience
- Establish goals.

Revision:

• Develop and implement revision plan

Development :

- Create content outline
- Review existing materials
- Organize and develop content.
- Select / develop materials and delivery methods

Evaluation :

- Review goals and objectives.
- Develop evaluation strategy
- Collect and analyze data.

The Design Stage :

• Determine the need for instruction : To begin, determine the need for instruction by considering what external data verify the need, what factors led to the instructional need, and what past experiences indicate that the instruction being planned can effectively meet this need

- Analyze your audience : To better understand the distant learners and their needs, consider their ages, cultural backgrounds, past experiences, interests and educational levels Assess their familiarity with the various instructional methods and delivery systems being considered, determine how they will apply the knowledge gained in the course, and note whether the class will consist of a broad mix of students or discrete subgroups with different characteristics (e g urban / rural, undergraduate / graduate) When possible, the instructor should visit distant sites and interview prospective students, both individually and in small groups This personalized attention will also show students that the instructor is more than an anonymous presence, linked by electronic technology Colleagues who have worked with the target population can also offer advice
- Establish instructional goals / objectives : Based on the nature of the problem as well as student needs and characteristics, establish instructional goals and objectives Goals are broad statements of instructional intent, while objectives are specific steps leading to goal attainment.

The Development Stage :

- Create a content outline : Based on the instructional problems, the audience analysis, instructional goals and objectives, and an understanding of the desired course content, create an outline of the content to be covered
- Review existing materials : Next, the instructor should review existing materials Instructional materials should not be used solely because they are readily available or have been effective in a traditional classroom setting (Beare, 1989) This is especially true if pre-packaged materials, such as telecourses, are being considered Whereas many pre-packaged instructional tools are developed and marketed to reach students with similar backgrounds and experiences, they may have little relevance for distant learners who come to the course with widely varied and non-traditional experiential backgrounds If pre-packaged materials are to be used, consider developing wrap around introductions, conclusions, and summaries that specifically relate the learning materials to the instructional context of the distant student

- Organize and develop content: Perhaps the greatest challenge facing the distance educator is creating student-relevant examples. Content, for the most part, is taught using examples that relate the content to a context understood by the students. The best examples are "transparent", allowing the learners to focus on the content being presented. If examples are irrelevant, learning is impeded. This is a special challenge in rural and multicultural settings where the teachers realm of experience and related content examples may be foreign to distant learners. To address this problem, discuss potential content examples with a sampling of the target audience.
- Select / develop materials and methods: The development of instructional materials and selection of delivery methods will often require integrating print, voice, video, and data technology in concert with face-to-face communication. The challenge here is to integrate delivery components, based on identifiable learner needs, content requirements, and technical constraints. For example, it does little good to rely on delivery technology that is unavailable to some class members. Make sure the same delivery systems are available to all distant learners to avoid the need to create parallel learning experiences.

The Evaluation Stage :

- Review goals and objectives : One purpose of evaluation is to determine if the instructional methods and materials are accomplishing the established goals and objectives Implementation of instruction represents the first real test of what has been developed Try to pre-test instruction on a small scale prior to implementation If this is not possible, the first actual use will also serve as the "field test" for determining effectiveness
- Develop an evaluation strategy: Plan how and when to evaluate the effectiveness of the instruction Formative evaluation can be used to revise instruction as the course is being developed and implemented For example, the distance educator can give students pre-addressed and stamped postcards to complete and mail after each session These "mini-evaluations" might focus on course strengths and weaknesses, technical or delivery concerns, and content areas

in need of further coverage **Summative evaluation** is conducted after instruction is completed and provides a data base for course revision and future planning Following course completion, consider a summative evaluation session in which students informally brainstorm ways to improve the course Consider having a local facilitator run the evaluation session to encourage a more open discussion Within the context of formative and summative evaluation, data are collected through quantitative and qualitative methods **Quantitative evaluation** relies on a breadth of response and is patterned after experimental research focused on the collection and manipulation of statistically relevant quantities of data

- In contrast, **qualitative** evaluation focuses on a depth of response, using more subjective methods such as interviews and observation to query a smaller number of respondents in greater depth Qualitative approaches may be of special value because the diversity of distant learners may defy relevant statistical stratification and analysis The best approach often combines quantitative measurement of student performance with open-ended interviewing and non-participant observation to collect and assess information about attitudes toward the course's effectiveness and the delivery technology
- Collect and analyze evaluation data : Following implementation of your course / materials, collect the evaluation data Careful analysis of these results will identify gaps or weaknesses in the instructional process. It is equally important to identify strengths and successes Results of the evaluation analysis will provide a "springboard" from which to develop the revision plan.

The Revision Stage :

There is room for improvement in even the most carefully developed distance delivered course, and the need for revision should be anticipated In fact, there will likely be more confidence in a course that has been significantly revised than in one considered flawless the first time through

Revision plans typically are a direct result of the evaluation process in tandem with feedback from colleagues and content specialists The best source of revision ideas may be the instructors own reflection on course strengths and weaknesses For this reason, revision should be planned as soon as possible after course completion

Often, course revisions will be minor, such as breaking a large and unwieldy instructional unit into more manageable components, increasing assignment feedback, or improving student-to-student interaction. On other occasions, major revisions will be needed. Significant course changes should be field-tested prior to future course use

Test revision ideas on small groups of distant learners, content specialists, and colleagues Results of this process should be tempered by the knowledge that the characteristics of each distant class will vary and that revisions required for one learner group may be inappropriate for a different student population

While it is possible, even appropriate on occasion, to shorten the instructional development process, it should be done only after considering the needs of the learner, the requirements of the content, and the constraints facing both teacher and students. Adhering to sound principles of instructional development wont overcome all obstacles one encountered en route to developing effective distance education programs. It will, however, provide a process and procedural framework for addressing the instructional challenges that will surely arise.

From the above studies it has been found that both distance and traditional learners influenced by the three independent variables namely Instructional Effectiveness, Self-Concept and Test Anxiety selected in the study Distance Education gradually increase its height and it is more important to give a proper feedback for the learners for their achievement.





CHAPTER – III METHODOLOGY

3.1 Types of Research :

The nature of study is based on survey type of research. Initially dimension of the study has been confirmed through review of related literature and from standardized questionnaire data has been collected and finally interpreted

3.2 Nature of the Population :

By population the aggregate or the totality of objects or individual having one or more characteristics in common that are of interest to the researcher and regarding which inferences are to be made in a sampling study. It includes all those people or documents who are proposed to be covered under the scheme of study.

In the present research work, the researcher proposed to select students as population of the study specially for first year M A. in Education students under the different Universities of West Bengal in traditional and distance mode.

3.3 Nature of Sample :

A sample is a small portion of a population selected for observation and analysis By observing the characteristics of the sample, one can make certain inferences about the characteristics of the population from which it has been drawn

For the present study the researcher has collected 600 samples from class M A - 1 both from distance and traditional learners through purposive sampling

The researcher selected his sample through purposive sampling The sample was selected with a definite purpose in view and the choice of the sampling units depended entirely on the discretion and judgment of the investigator. In purposive sampling in educational problems, it was enough to select institutions or classrooms where the researcher could administer tests, make an interview according to the need of the researcher more systematically and easily

3.4 Construction of Questionnaire :

To prepare the questionnaire the researcher had gone through the detailed description of review of related studies. He analyzed the three different variables very minutely and consulted with the experts regarding various dimensions and drawbacks of the present study. The items of the questionnaire were prepared on the basis of various information's obtained from survey conducted at various universities and distance education study centers. For each statement, a five point scale was provided to enable the respondents to give their opinion for each statement more objectively.

3.5 Principles of Preparing Questionnaire :

The questionnaire prepared by the researcher is in the restricted or closed form. The items of the questionnaire, i e the statements were prepared with the following principles in view

- The significance of the study was stated clearly
- The researcher has tried to seek information which was not obtained from other resources like books reports, records, etc
- The researcher had tried to make question as short and clear as possible
- The researcher had tried to select each item that covered a single area
- The researcher had tried to arrange the item in categories
- The researcher had tried to avoid double-barrelled questions
- The researcher had tried to minimize the double negative questions
- The researcher had tried to define terms that could easily be misinterpreted
- The researcher had tried to provide adequate number of alternatives against each question
- The researcher had tried to give point of reference
- The researcher had tried to design the question to get a complete response
- The researcher had taken due precaution to make it attractive in nature by properly arranging the items and getting them in clearly printed form

3.6 Standardization of the Questionnaire :

To construct and standardize the questionnaire for the students of first year at

P G level and to measure the comparative parameters, the researcher standardized the test.

3.7 Developing Working Concept :

Before the construction of a test, developing of working concept is essential. It includes a detailed set of specification as to the purpose of the test and time, and the cost and recourses at the disposal of the researcher. The nature of the population for which the test is constructed has to be defined. The length of the test, type and nature of the test and method of scoring are some of the basic considerations which are to be planned in advance in this stage. For the present study the researcher tried to develop a working concept before proceeding with his research work.

3.8 Operational Definitions of the Variables used in the Study :

Instructional Effectiveness :

On the basis of work by Anderson (1991, 2004), Brophy (2001), Baumert *et al* (2000), NCS (2002) Muijs & Reynolds (2001) and OECD (2003), a strong corroboration of the main characteristics of effective instruction as laid out in the previous sections can be discerned. In addition to this consolidation in the knowledge base there are a few additional newer trends.

- A reconsideration of personal characteristics of effective teachers
- More attention to the teaching of higher order skills, self-regulated learning and "constructivist" approaches
- A strong re-statement of the fact that teaching is about facilitating learning, by considering learning activities and student engagement

'Instruction is most effective when it is problem-based, activates prior learner knowledge, demonstrates what is to be learned, provides opportunities for guided practice, and encourages integration with everyday life' (Merrill, 2001)

There are also studies that focus on assessing the transfer of specific aspects of courses. For example, Suters, Melear and Hickok (2002) examined the extent to which science teachers used the inquiry method they had been taught in a biology course when they later became classroom teachers

Ormrod (2006) defines learning as "a long-term change in mental representations and associations due to experience"

- Are our efforts in the classroom producing these long-term changes ?
- When students leave our courses, how do we know what stays with them ?
- How can we make our instruction more effective ?

By keeping students at the center of one's classroom, a teacher can encourage and inspire students to seek out knowledge and to strive for understanding at a deeper level Through this process, students see a greater relevance for and a stronger connection to the subject at hand Through student-centered instruction, our students can achieve independent minds and the capacity to make educational decisions and value judgments (Brown, 2008).

Self-concept :

Self-concept is an individual's assessment of his or her status on a single trait or on many human dimensions using societal or personal norms as criteria. Selfconcept or self-identity is the mental and conceptual understanding and persistent regard that sentient beings hold for their own existence. In other words, it is the sum total of a being's knowledge and understanding of his or her self.

Self-concept as "The self is something of which we are immediately aware We think of it as the warm, central private region of out life. As such it play a crucial part in our consciousness (a concept broader than self), in our personality (a concept broader than consciousness) and in our organism (a concept broader than personality) Thus it is some kind of core in our being" Allport (1961)

Self-concept as the "Key stone of personality" Cattell (1957)

Self-Concept is the nucleus around which the entire personality structure revolves in its homeostatic process of maintaining consistency and stability within the individual personality

Test Anxiety :

Test anxiety refers to a complex of physiological and emotional responses to tension or stress resulting from apprehension for upcoming exams In general, it is an uneasiness or apprehension experienced before, during, or after an examination because of concern, worry, or fear Almost everyone experiences some anxiety But some students find that anxiety interferes with their learning and test taking to such an extent that their grades are seriously affected. Though a minimum level of anxiety can be a powerful motivator, but some student experience test-related anxiety to such a degree that it can lead to poor performance

Anxiety for success-oriented achievements not only in educational deliberations, but also in other fields of life and work, has become the primary requirement of the individuals A proven success depends upon the results on any test anxiety scale examination for assessing educational attainments, but various critical conditions of life in different perspective in general, post test situation

Application of 'Test Anxiety Scale' functions as a predictive measure highlighting the probability of success of failure of the individual However, it is more so, and greatly affected by academicians who are frequently influenced by their test performance

Academic Achievement :

It indicates the level of intellectual ability of an individual It also means brightness in academic subjects This academic brightness is developmental in nature Academic Achievement is usually means achievements at first year P G level students

Academic Achievement has been defined by Kinkas and Khair as "Academic Achievement is an aspect of behaviours and an important aspect to students who are engaged in the process of education and since it depends on its degree of effectiveness for maximum performance"

3.9 Selection of Tools :

In this study the tools that the researcher selected were questionnaires of Instructional Effectiveness, Self-Concept and Test Anxiety A questionnaire is a group of items (stimuli) presented in either question or statement form in order to elicit responses from the participants A good questionnaire is very much cautious about its wordings It should be relevant with reference to the topic, short, simple and clear in construction and devoid of any hints Any questionnaire provides three types of information

- Face sheet providing identification
- Census type providing sociological information
- Problem information, 1 e, the questions themselves

However, every questionnaire consists of certain simple instruction provided for the participants A questionnaire may be either open ended or closed type based on the nature of response The nature of administration of questionnaire may be either individual or group

The questionnaire prepared by the researcher were three in numbers mentioned below

- 1) Instructional effectiveness
- 2) Self-concept.
- 3) Test Anxiety

The main objective of the questionnaire was to analyze the student's responses which would be helpful to understand the factors that contribute to Instructional effectiveness, Self-concept and Test Anxiety in traditional and distance learners

An unstructured interview was taken by the researcher to record the personal view points of the teachers An analysis of the interview ultimately helped the researcher to draw certain findings useful for the study After consultation with the experts, the researcher corrected, modified or deleted some items and finalized the questionnaire

3.10 Construction of Pilot Test :

In the present study, 48 items of Instructional Effectiveness, 42 items of Self-Concept and 32 items of Test Anxiety have been developed by the researcher Word instructions which indicated briefly the nature and purpose of the test were supplied with the test The pilot test then formed was administered to a small group of samples from the population and the responses were checked It is called "small-group try out" of the test The procedure suggested further modification After the necessary modification in the light of the experts opinion and "small group try out" the preliminary draft was printed

Tuming of Pilot Test :

Once pilot test is formed, the time required by the samples to answer the different test items was determined. For this, the researcher had to consider the mental abilities and situation of the samples. The time thus allotted must be printed on the test format. For the present study, 40 minutes were allotted for answering of the items of each questionnaire.

Application of the Pilot Test :

At this stage, the pilot test was administered by the researcher on 100 samples The samples were taken from students of P G Level–1 of both rural and urban co-education colleges After pilot study, items had been selected on the basis of "t" test and were standardized

3.11 Description of Tools :

3.11.1 Instructional Effectiveness Scale :

In this study the researcher constructed the Instructional Effectiveness Scale At first the items were constructed after searching the review of literature Then the questionnaire was applied on selected samples of university students of traditional and distance mode

Dimensions of Instructional Effectiveness Scale :

This research is identified in the literature as "process-product studies" Lowyck, quoted by Weeda (1986) summarises variables which emerged "strongly" in various studies

- Clarity : Clear presentation adapted to suit the cognitive level of pupils
- Flexibility : Varying teaching behaviour and teaching aids, organizing different activities etc
- Enthusiasm : Expressed in verbal and non-verbal behaviour of the teacher

- Task related and / or businesslike behaviour : Directing the pupils to complete tasks, duties, exercises etc in a businesslike manner
- Criticism : Much negative criticism has a negative effect on pupil achievement
- Indirect activity : Taking up ideas, accepting pupils' feelings and stimulating selfactivity
- Providing the pupils with an opportunity to learn criterion material : A clear correspondence between what is taught in class and what is tested in examinations and assessments
- Making use of stimulating comments : Directing the thinking of pupils to the question, summarising a discussion, indicating the beginning or end of a lesson, emphasizing certain features of the course material
- Varying the level of both cognitive questions and cognitive interaction

Numerous research studies and meta-analyses have confirmed the validity of the Carroll model The Carroll model has also been the basis for Bloom's Concept of Mastery Learning (Bloom, 1968) and is also related to "direct instruction", as described by Rosenshine (1983)

Characteristics of mastery learning are

- Clearly defined educational objectives
- Small discrete units of study
- Demonstrated competence before progress to later hierarchically related units
- Remedial activities keyed to student deficiencies
- Criterion-referenced rather than norm-referenced tests (Block & Burns, 1970)

Direct instruction also emphasizes structuring the learning task, frequent monitoring and feedback and high levels of mastery (success rates of 90 to 100% for initial tasks) in order to boost the self-confidence of the students

| Traditional Instruction | Instruction Inspired by Constructivism |
|------------------------------------|--|
| • emphasis on basic skills subject | • bias towards higher order skills |
| matter orientation structured | • emphasis on learning process |
| approach | • discovery-learning |
| • pre-specified objectives | • "rich" learning environment |
| • small steps | • intrinsic motivation |
| • frequent questioning / feedback | • challenging problems |
| • reinforcement through high | • situation-specific knowledge, |
| percentage of mastery discovery- | • learning from cases |
| learning | • assessment, less circumscribed alternative |
| • abstract-generalizable | • procedures |
| knowledge | - |
| • standardized achievement tests | |
| 10000 - Cale - 1000 | |

Table 2 : Comparison of Traditional and Constructivist Instructional Models

Source · Scheerens, 1995

Summary of recent reviews and the Observation Categories of the Dutch Inspectorate (2006)

| | Table 5: Categories of the Dutch Inspectorate (2006) | | |
|---|--|---|--|
| | Teaching (Anderson) | Brophy | |
| • | Enacted curriculum | • Opportunity to learn | |
| • | Classroom physical environment. | Curricular alignment | |
| • | Classroom climate | • Supportive classroom climate | |
| • | Classroom organisation & | • Achievement expectations | |
| | management. | • Cooperative learning | |
| • | Actual teaching | • Goal-oriented assessment | |
| | Pre-conditions (lesson planning) | • Coherent content, clear explanations | |
| | Communication with students | • Thoughtful discourse | |
| | Stimulating involvement | • Establishing learning orientations | |
| | | • Sufficient opportunities for practice | |
| | | and application | |

Table 2 Cat £41. D . .

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| | Scaffolding student's task |
|---|-------------------------------------|
| | engagement |
| | • Modeling learning and self- |
| | regulation strategies |
| Dutch Inspectorate | Baumert <i>et al</i> . |
| • Learning time | Quantity and quality of instruction |
| • Support in climate | Teacher-student relations. Student- |
| • Challenge in climate | student relations |
| • Structure in teaching | |
| Activating students | |
| Teaching learning strategies | |
| • Attainment/teacher focus on attention | |
| Classroom organization | |

The results of this review, in the sense of a listing of the most important effectiveness enhancing teaching conditions are presented in the table below

| Relevance | Opportunity to learn | | | | | |
|-------------------------|-----------------------------------|--|--|--|--|--|
| | Curriculum alignment | | | | | |
| Time | Learning time | | | | | |
| Structure | Structured teaching | | | | | |
| | Stimulating engagement | | | | | |
| | Monitoring and questioning | | | | | |
| | Feedback and reinforcement | | | | | |
| | Modelling learnmg/self-regulation | | | | | |
| Classroom environment | Task-oriented climate | | | | | |
| | Mutual respect | | | | | |
| | Orderliness, safety | | | | | |
| Teacher characteristics | Subject matter mastery | | | | | |
| | Verbal intelligence | | | | | |
| | Teaching repertoire | | | | | |
| | Achievement orientation | | | | | |

Table 4 : Effectiveness enhancing Teaching Conditions

Researcher identified six dimensions of effective instruction through metaanalysis of various type of literature review

| Code Number | Instructional Effectiveness Dimension | | | | | | |
|-------------|---------------------------------------|--|--|--|--|--|--|
| A | Time management | | | | | | |
| В | Feedback | | | | | | |
| C | Strategy | | | | | | |
| D | Mastery of the subject matter | | | | | | |
| E | Organization | | | | | | |
| F | Teacher-student relationship | | | | | | |

Table 5: Dimensions of Effective Instruction

Each item of the inventory was provided with five alternatives Responses were obtained on the questionnaire itself. There was no time limit but generally 30 minutes had been found sufficient for responding all the items. Instructions for the time of administration of the inventory were also given on the questionnaire

Scoring :

The respondent was provided with five alternatives to give his responses ranging from most acceptable to least acceptable description of his instructional effectiveness, the alternatives or responses were arranged in such a way that the scoring system for all the items will remain the same i e 1, 2, 3, 4, 5 whether the items were positive or negative. If the respondent put (\checkmark) mark for first alternative the score was 1, for second alternative the score was 2, for third alternative the score was 3, for the fourth it was 4 and for the fifth and last alternative the score was 5. The summated score of all the thirty-seven items provided the total instructional effectiveness score of an individual. A high score on this inventory indicated a higher instructional effectiveness, while a low score showed low instructional effectiveness. The score of each item was transferred on the front page against that item. Therefore total number of items in the Instructional Effectiveness Scale was 48. After item analysis, 11 items were rejected and finally 37 items were selected as final items.

Item Analysis :

The major objectives of Item Analysis are the improvement of total score reliability or of total score validity, or both, and the achievement of better item sequences and types of score distributors

For the present study, at first the scores were arranged in a descending order Then from the academic achievement scores of the students they were segregated as high group and low group students Then the scores of top 27% of students and bottom 27% of students were determined Then they were arranged in tabulated form From this tabulation, at first 't' test analysis for each item was done

For the item analysis, mean of High group (M_1) and the mean of Low group (M_2) , standard deviation of High group (SD_1) and the standard deviation of Low group (SD_2) and the validity of High group (V_1) and the validity of Low group (V_2) were calculated Thus t-test was performed to get the 't' values

| Item | | High | | | Low | | MD | n | Т | Sig. level |
|------|------|------|------|------|-------|-----------|------|----|------|------------|
| Item | M1 | SD1 | V1 | M2 | SD2 | V2 | | | | |
| 1 | 3 37 | 1 14 | 1 29 | 2 22 | 1 27 | 1 61 | 1 15 | 54 | 4 95 | ** |
| 2 | 2 50 | 1 30 | 1 69 | 2 30 | 1 3 1 | 1 72 | 0 20 | 54 | 0 81 | NS |
| 3 | 3 76 | 1 33 | 1 77 | 2 59 | 1 43 | 2 06 | 1 17 | 54 | 4 38 | ** |
| 4 | 4 37 | 1 00 | 0 99 | 2 83 | 1 53 | 2 33 | 1 54 | 54 | 6 20 | ** |
| 5 | 2 04 | 1 15 | 1 32 | 2 04 | 1 20 | 1 43 | 0 00 | 54 | 0 00 | NS |
| 6 | 4 00 | 1 33 | 1 77 | 2 31 | 1 53 | 2 33 | 1 69 | 54 | 6 11 | ** |
| 7 | 2 70 | 1 21 | 1 46 | 2 11 | 1 22 | 1 50 | 0 59 | 54 | 2 53 | * |
| 8 | 3 31 | 1 34 | 1 80 | 2 57 | 1 63 | 2 66 | 0 74 | 54 | 2 57 | * |
| 9 | 4 04 | 1 32 | 1 73 | 1 96 | 1 12 | 1 24 | 2 07 | 54 | 8 83 | ** |
| 10 | 2 37 | 1 17 | 1 37 | 1 89 | 1 02 | 1 04 | 0 48 | 54 | 2 28 | * |
| 11 | 3 91 | 1 36 | 1 86 | 3 13 | 1 47 | 2 1 5 | 0 78 | 54 | 2 85 | ** |
| 12 | 4 15 | 1 25 | 1 56 | 2 70 | 1 62 | 2 63 | 1 44 | 54 | 5 19 | ** |
| 13 | 2 61 | 1 50 | 2 24 | 1 89 | 1 19 | 1 42 | 0 72 | 54 | 2 77 | ** |
| 14 | 2 87 | 1 23 | 1 51 | 2 57 | 1 09 | 1 19 | 0 30 | 54 | 1 32 | NS |

Table 6 : t' test for Item Analysis for Instructional Effectiveness

| Itom | | High | | | Low | | MD | n | Т | Sig. level |
|------|-------|------|------|------|------|------|-------|----|-------|------------|
| Item | M1 | SD1 | V1 | M2 | SD2 | V2 | | | | Big. iever |
| 15 | 2 91 | 1 28 | 1 63 | 2 33 | 1 39 | 1 92 | 0 57 | 54 | 2 24 | * |
| 16 | 4 09 | 1 25 | 1 56 | 2 63 | 1 56 | 2 43 | 1 46 | 54 | 5 39 | ** |
| 17 | 2 69 | 1 19 | 1 43 | 2 56 | 1 22 | 1 50 | 0 13 | 54 | 0 56 | NS |
| 18 | 2 43 | 1 31 | 1 72 | 2 41 | 1 34 | 1 79 | 0 02 | 54 | 0 07 | NS |
| 19 | 4 4 8 | 1 21 | 1 46 | 4 09 | 1 15 | 1 33 | 0 39 | 54 | 1 71 | NS |
| 20 | 4 20 | 1 19 | 1 41 | 2 56 | 1 53 | 2 33 | 1.65 | 54 | 6 26 | ** |
| 21 | 2 76 | 1 32 | 1 73 | 2 22 | 1 19 | 1 42 | 0 54 | 54 | 2 22 | * |
| 22 | 4 63 | 0 92 | 0 84 | 4 39 | 1.12 | 1 26 | 0 24 | 54 | 1 22 | NS |
| 23 | 4 46 | 1 09 | 1 20 | 3 81 | 1 29 | 1 66 | 0.65 | 54 | 2 82 | ** |
| 24 | 4 31 | 0 84 | 0 71 | 2 85 | 1 48 | 2 20 | 1 46 | 54 | 6 30 | ** |
| 25 | 4 37 | 1 03 | 1 07 | 4 09 | 1 23 | 1 52 | 0 28 | 54 | 1 27 | NS |
| 26 | 4 13 | 1 13 | 1 28 | 2 93 | 1 40 | 1 96 | 1 20 | 54 | 4 91 | ** |
| 27 | 2 50 | 1 44 | 2 07 | 2 02 | 1 16 | 1 34 | 0 48 | 54 | 1 92 | NS |
| 28 | 4 4 1 | 0 98 | 0 96 | 2 31 | 1 36 | 1 84 | 2 09 | 54 | 9 18 | ** |
| 29 | 4 19 | 1 17 | 1 36 | 2 48 | 1 48 | 2 18 | 1 70 | 54 | 6 65 | ** |
| 30 | 4 4 8 | 0 97 | 0 93 | 2 59 | 1 49 | 2 21 | 1 89 | 54 | 7 83 | ** |
| 31 | 2 83 | 1 41 | 1 99 | 2 20 | 1 20 | 1 45 | 0 63 | 54 | 2 50 | * |
| 32 | 2 91 | 1 50 | 2 24 | 1 87 | 1 17 | 1 36 | 1 04 | 54 | 4 02 | ** |
| 33 | 3 00 | 1 58 | 2 49 | 3 33 | 1 50 | 2 26 | -0 33 | 54 | 1 12 | NS |
| 34 | 2 44 | 1 31 | 1 72 | 2.48 | 1 38 | 1 91 | -0 04 | 54 | 0 14 | NS |
| 35 | 3 30 | 1 40 | 1 95 | 2 72 | 1.38 | 1 90 | 0 57 | 54 | 2 1 5 | * |
| 36 | 3 54 | 1 49 | 2 22 | 2 20 | 1.29 | 1 67 | 1 33 | 54 | 4 97 | ** |
| 37 | 2 31 | 1 38 | 1 92 | 1 44 | 0 90 | 0 82 | 0 87 | 54 | 3 87 | ** |
| 38 | 4 17 | 1 18 | 1 39 | 2 31 | 1 44 | 2 07 | 1 85 | 54 | 7.32 | ** |
| 39 | 2 56 | 1 22 | 1 50 | 1 94 | 1 09 | 1 19 | 0 61 | 54 | 2 74 | ** |
| 40 | 4 02 | 1 30 | 1 68 | 2 91 | 1 63 | 2 65 | 1 1 1 | 54 | 3 92 | ** |
| 41 | 3 17 | 1 38 | 1 92 | 1 96 | 0 97 | 0 94 | 1 20 | 54 | 5 23 | ** |
| 42 | 2 52 | 1 37 | 1 88 | 1 93 | 1 10 | 1 20 | 0 59 | 54 | 2 48 | * |

| Téama | | High | | | Low | | MD | n | Т | Sig. level |
|-------|------|------|------|------|------|------|------|----|------|------------|
| Item | M1 | SD1 | V1 | M2 | SD2 | V2 | | | | ~ |
| 43 | 4 37 | 1 00 | 0 99 | 2 83 | 1 53 | 2 33 | 1 54 | 54 | 6 20 | ** |
| 44 | 2 61 | 1 50 | 2 24 | 1 89 | 1 19 | 1 42 | 0 72 | 54 | 2 77 | ** |
| 45 | 2 91 | 1 28 | 1 63 | 2 33 | 1 39 | 1 92 | 0 57 | 54 | 2 24 | * |
| 46 | 4 31 | 0 84 | 0 71 | 2 85 | 1 48 | 2 20 | 1 46 | 54 | 6 30 | ** |
| 47 | 3 31 | 1 34 | 1 80 | 2 57 | 1 63 | 2 66 | 0 74 | 54 | 2 57 | * |
| 48 | 4 11 | 1 22 | 1 50 | 2 81 | 1 66 | 2 76 | 1 30 | 54 | 4 62 | ** |

| M1= Mean for High Group | SD1 = Standard Deviation for High Group |
|-----------------------------|---|
| M2 = Mean for Low Group | SD2 = Standard Deviation for Low Group |
| MD = Mean Difference | V1 = Variance for High Group |
| V2 = Variance for Low Group | n = Total observations in each group |
| t at $0.05 = 1.98$ | t at 0 01 = 2 62 |
| | |

*Sig at 0 05 level, ** Sig at 0 01 level, NS = Not Significant

Items Rejected after Item Analysis : 2, 5, 14, 17, 18, 19, 22, 25, 27, 33, 34

After first try out, some items were rejected and then researcher added some questions for applying second try out. After second try out, opinion of experts were taken by the researcher for finally constructing the dimension, reliability, validity, norms etc of the instructional effectiveness scale

| Table 7 : | Instructional | Effectiveness | Scale |
|------------|------------------|---------------|-------|
| I able / a | i insti uctionai | Lincentens | ~~~~ |

| Code No. | Instructional Effectiveness Dimension | No. of items |
|----------|---------------------------------------|--------------|
| A | Time management | 6 |
| В | Feedback | 6 |
| C | Strategy | 6 |
| D | Mastery of the subject matter | 7 |
| E | Organization | 6 |
| F | Teacher student relationship | 6 |
| , | 37 | |

3.11.2 Self-Concept Scale :

In this study, the researcher adopted 'Dr R K Saraswat's Self-Concept Questionnaire (S C Q)' constructed by Dr Raj Kumar Saraswal, Reader in Psychology, Department of Educational Psychology, Counseling and Guidance, National Council for Educational Research and Training and locally standardized by the researcher

Description of Self-Concept Scale :

This description had been taken from the manual of the Self-Concept Questionnaire

Self-concept is a dominant element in personality pattern, therefore, the measurement of Self-concept becomes essential Self-concept has been referred by Lowe (1961)' as one's attitude towards self and by Paderson (1965) as an organized configuration of perceptions, beliefs, feelings, attitudes and values which are the individual views as a part of characteristics of himself Rogers (1951) defined selfconcept as 'An organized configuration of perceptions of the self which are admissible to awareness' It is compared to such elements as the perceptions of one's characteristics and abilities, the percepts and concepts of the self in relation to others and to the environment, the value qualities which are perceived as associated with experiences and objects and the goals and ideals which are perceived as having positive or negative valence" Saraswat and Gaur (1981) described self-concept as "The self-concept is the individuals way of looking at himself It also signifies his way of thinking feeling and behaving" Lynche, Norem-Hebeisen and Gergen (1981) have quoted William Fitt's suggestion that attention should be shifted from global measures of this self-concept to configurations of responses across self-concept Such configurational patterns should be mere sensitive to environmental effects

An examination of various instruments developed to measure Self-concept reveals that these measures have not incorporated many important components of selfconcept presumed in theory and in observation. These measures do not deal with all aspects of self-concept, but provide narrow and limited information depending upon purpose and interest of investigators. Adolescence is a period of life with its own peculiar characteristics and problems Hence for deep penetration into their perceptions their own physical, social, temperamental, educational moral and intellectual spheres of self-concept need to be explored As such, an attempt had been made in this questionnaire for eliciting information regarding adolescent's perceptions and characteristics

Dimensions of Self-Concept :

The self-concept inventory provides four separate dimensions of self-concept, viz Physical, Social, Intellectual and Emotional Self-concept. It also gives a total self-concept score The operational definitions of self-concept dimensions measured by this inventory were

- **Physical** : Individuals view of their body, health, physical appearance and strength
- Social : Individual's sense of worth in social interaction
- Intellectual : Individual's awareness of their intelligence and capacity of problem solving and judgments
- Emotional : Individuals view of their prevailing emotional state or predominance of a particular kind of emotional reaction

The inventory contained 32 items Each dimension contained eight items Each item was provided with five alternatives Responses were obtained on the test booklet itself There was no time limit but generally 20 minutes had been found sufficient for responding all the items Instructions for the time of administration of the inventory were also given on the test booklets

Scoring :

The respondent was provided with five alternatives to give his responses ranging from most acceptable to least acceptable description of his self-concept, the alternatives or responses were arranged in such a way that the scoring system for all the items would remain the same i = 5, 4, 3, 2, 1 whether the items were positive or negative. If the respondent put (\checkmark) mark for first alternative the score was 5, for second alternative the score was 4, for third alternative score was 3, for the fourth it

was 2 and for the fifth and last alternative the score was 1 The summated score of all the forty eight items provided the total self-concept score of an individual A high score on this inventory indicated a higher self-concept, while a low score showed low self-concept The score of each item was transferred on the front page against that item Now all the scores of eight items given in that column were added giving the score for that particular dimension of self-concept

Item Analysis :

The major objectives of Item Analysis are the improvement of total score reliability or of total score validity, or both, and the achievement of better item sequences and types of score distributors

For the present study, at first the scores were arranged in a descending order Then from the academic achievement scores of the students they were segregated as high group and low group students Then the scores of top 27% of students and bottom 27% of students were determined Then they were arranged in tabulated form From this tabulation, at first 't' test analysis for each item was done

For the item analysis, mean of High group (M_1) and the mean of Low group (M_2) , standard deviation of High group (SD_1) and the standard deviation of Low group (SD_2) and the validity of High group (V_1) and the validity of Low group (V_2) were calculated Thus t-test was performed to get the 't' values

| T. | | High | | | Low | | MD | n | Т | Sig. level |
|------|------|------|-----------|------|------|------|------|----|------|------------|
| Item | M1 | SD1 | V1 | M2 | SD2 | V2 | | | | |
| 1 | 3 37 | 1 14 | 1 29 | 2 22 | 1 27 | 1 61 | 1 15 | 54 | 4 95 | ** |
| 2 | 2 50 | 1 30 | 1.69 | 2 30 | 1 31 | 1 72 | 0 20 | 54 | 0 81 | NS |
| 3 | 3 76 | 1 33 | 1 77 | 2 59 | 1 43 | 2 06 | 1 17 | 54 | 4 38 | ** |
| 4 | 4 37 | 1 00 | 0 99 | 2 83 | 1 53 | 2 33 | 1 54 | 54 | 6 20 | ** |
| 5 | 2 04 | 1 15 | 1 32 | 2 04 | 1 20 | 1 43 | 0 00 | 54 | 0 00 | NS |
| 6 | 4 00 | 1 33 | 1 77 | 2 31 | 1 53 | 2 33 | 1 69 | 54 | 6 11 | ** |
| 7 | 3 31 | 1 34 | 1 80 | 2 57 | 1 63 | 2 66 | 0 74 | 54 | 2 57 | * |

Table 8 : t' test for Item Analysis for Self-concept

| Itom | | High | | Τ | Low | | MD | n | n T | Sig. level |
|--------|-------|------|------|------|-------|-------|-------|----|------|------------|
| 110111 | M1 | SD1 | V1 | M2 | SD2 | V2 | | | | |
| 8 | 4 04 | 1 32 | 1 73 | 1 96 | 1 12 | 1 24 | 2 07 | 54 | 8 83 | ** |
| 9 | 2 37 | 1 17 | 1 37 | 1 89 | 1 02 | 1 04 | 0 48 | 54 | 2 28 | * |
| 10 | 4 15 | 1 25 | 1 56 | 2 70 | 1 62 | 2 63 | 1 44 | 54 | 5 19 | ** |
| 11 | 2 61 | 1 50 | 2 24 | 1 89 | 1 19 | 1 42 | 0 72 | 54 | 2 77 | ** |
| 12 | 2 87 | 1 23 | 1 51 | 2 57 | 1 09 | 1 19 | 0 30 | 54 | 1 32 | NS |
| 13 | 2 91 | 1.28 | 1 63 | 2 33 | 1 39 | 1 92 | 0 57 | 54 | 2 24 | * |
| 14 | 4 46 | 0 95 | 0 89 | 2 87 | 1 54 | 2 38 | 1 59 | 54 | 6 47 | ** |
| 15 | 2 69 | 1 19 | 1 43 | 2 56 | 1 22 | 1 50 | 0 13 | 54 | 0,56 | NS |
| 16 | 2 43 | 1 31 | 1 72 | 2 41 | 1 34 | 1 79 | 0 02 | 54 | 0 07 | NS |
| 17 | 4 48 | 1 21 | 1 46 | 4 09 | 1 1 5 | 1 33 | 0 39 | 54 | 1 71 | NS |
| 18 | 4 20 | 1.19 | 1 41 | 2 56 | 1 53 | 2 33 | 1 65 | 54 | 6 26 | ** |
| 19 | 2 76 | 1 32 | 1 73 | 2 22 | 1 19 | 1 42 | 0 54 | 54 | 2 22 | * |
| 20 | 3 76 | 1 26 | 1 58 | 2 44 | 1 50 | 2 2 5 | 1 31 | 54 | 4 93 | ** |
| 21 | 4 63 | 0 92 | 0 84 | 4 39 | 1 12 | 1 26 | 0 24 | 54 | 1 22 | NS |
| 22 | 4 46 | 1 09 | 1 20 | 3 81 | 1 29 | 1 66 | 0 65 | 54 | 2 82 | ** |
| 23 | 4 31 | 0 84 | 0 71 | 2 85 | 1 48 | 2 20 | 1 46 | 54 | 6 30 | ** |
| 24 | 4 37 | 1 03 | 1 07 | 4 09 | 1 23 | 1 52 | 0 28 | 54 | 1 27 | NS |
| 25 | 4 13 | 1 13 | 1 28 | 2 93 | 1 40 | 1 96 | 1 20 | 54 | 4 91 | ** |
| 26 | 2 50 | 1 44 | 2 07 | 2 02 | 1 16 | 1 34 | 0 48 | 54 | 1 92 | NS |
| 27 | 4 4 1 | 0 98 | 0 96 | 2 31 | 1 36 | 1 84 | 2 09 | 54 | 9 18 | ** |
| 28 | 4 19 | 1 17 | 1 36 | 2 48 | 1 48 | 2 18 | 1 70 | 54 | 6 65 | ** |
| 29 | 4 11 | 1 22 | 1 50 | 2 81 | 1 66 | 2 76 | 1 30 | 54 | 4 62 | ** |
| 30 | 4 4 8 | 0 97 | 0 93 | 2 59 | 1 49 | 2 21 | 1 89 | 54 | 7 83 | ** |
| 31 | 2 83 | 1 41 | 1 99 | 2 20 | 1 20 | 1 45 | 0 63 | 54 | 2 50 | * |
| 32 | 2 91 | 1 50 | 2 24 | 1 87 | 1 17 | 1 36 | 1 04 | 54 | 4 02 | ** |
| 33 | 3 00 | 1 58 | 2 49 | 3 33 | 1 50 | 2 26 | -0 33 | 54 | 1 12 | NS |
| 34 | 3 30 | 1 40 | 1 95 | 2 72 | 1 38 | 1 90 | 0 57 | 54 | 2 15 | * |
| 35 | 3 54 | 1 49 | 2 22 | 2 20 | 1 29 | 1 67 | 1 33 | 54 | 4 97 | ** |

| Item | High | | | | Low | | | n | т | Sig level |
|------|------|------|------|------|------|------|------|----|------|------------|
| liem | M1 | SD1 | V1 | M2 | SD2 | V2 | | | | Sig. ievei |
| 36 | 4 17 | 1 18 | 1 39 | 2 31 | 1 44 | 2 07 | 1 85 | 54 | 7 32 | ** |
| 37 | 4 02 | 1 30 | 1 68 | 2 91 | 1 63 | 2 65 | 1 11 | 54 | 3 92 | ** |
| 38 | 3 17 | 1 38 | 1 92 | 1 96 | 0 97 | 0 94 | 1 20 | 54 | 5 23 | ** |
| 39 | 2 52 | 1 37 | 1 88 | 1 93 | 1 10 | 1 20 | 0 59 | 54 | 2 48 | * |
| 40 | 2 61 | 1 50 | 2 24 | 1 89 | 1 19 | 1 42 | 0 72 | 54 | 2 77 | ** |
| 41 | 2 91 | 1 28 | 1 63 | 2 33 | 1 39 | 1 92 | 0 57 | 54 | 2 24 | * |
| 42 | 4 31 | 0 84 | 0 71 | 2 85 | 1 48 | 2 20 | 1 46 | 54 | 6 30 | ** |

| M1= Mean for High Group | SD1 = Standard Deviation for High Group |
|-----------------------------|---|
| M2 = Mean for Low Group | SD2 = Standard Deviation for Low Group |
| MD = Mean Difference | V1 = Variance for High Group |
| V2 = Variance for Low Group | n = Total observations in each group |
| t at $0\ 05 = 1\ 98$ | t at $0 \ 01 = 2 \ 62$ |
| | |

*Sig at 0 05 level, ** Sig at 0 01 level, NS = Not Significant

Items Rejected after Item Analysis : 2, 5, 12, 15, 16, 17, 21, 24, 26, 33

| Code Number | Self-concept Dimension | Number of items 8 | | | |
|-------------|------------------------|----------------------|--|--|--|
| Α | Physical | | | | |
| В | Social | 8 | | | |
| С | Intellectual | 8 | | | |
| D | Emotional | 8 | | | |
| То | 32 | | | | |

Table 9 : Self-concept Scale

3.11.3 Test Anxiety Scale :

In this study, the researcher adopted 'Sharma's Test Anxiety Scale (TAS)' administered by Dr V P Sharma, Ex-Professor and Head, Department of Psychology, Pt. Ravishankar Shukla University and locally standardized by the researcher

Description of the Scale :

This description had been taken from the manual of the Test Anxiety Scale Test Anxiety is the consequential effect of the gap that exists or is being visualized to exist between the judgment score and the performance score. In a test anxiety situation, a consequence of the probable difference between the expectancy score and the valence, i.e. the achievement score is generated. When the high achievers perceive behind in their target before, during or after the examination, they develop test anxiety

As such, test anxiety is an important component of our personality and is closely associated with severe personality disturbances and concomitant difficulties in the teaching-learning process

Objective of Developing Test Anxiety Scale :

In order to enhance the specificity of Test Anxiety and to evaluate test performance in a more comprehensive and valid way, Test Anxiety Questionnaire was developed for the first time by Sarason and Mandler (1950) With a view to meeting the need of the Indian pupils, in particular, common man in general, V P Sharma (1978) developed and standardized a Test Anxiety Scale, which had been revised adequately keeping in view the emerging changes and challenges in the next millennium, particularly in the examination system and cultural awakening

Item Construction :

Development of 'Test Anxiety" demands specific test situations that the students encounter before the approaching examination / testing hours As such it is therefore essential to visualize the probable testing situations as source of test items Each source of test item was stated in the form of a test situation, having five alternative options arranged in a hierarchical order, the first carrying the minimum test anxiety whereas the fifth option the maximum Necessary modifications were incorporated in the Test Anxiety items, to ensure that the test situations were intelligible to the students Employing this technique initially, 110 Test Anxiety items representing each test situation were constructed

2

Scoring :

The scale could be scored accurately by hand and no scoring key or stencil was required This scale consisted of situations having 5 alternative answers hierarchically presented These five alternative answers were assigned weights –

| Alternative Number | Weights Assigned | | | | |
|--------------------|------------------|--|--|--|--|
| First Alternative | 1 | | | | |
| Second Alternative | 2 | | | | |
| Third Alternative | 3 | | | | |
| Fourth Alternative | 4 | | | | |
| F1fth Alternative | 5 | | | | |

Table 10 : Alternative Answers and Assigned Weights

The answers ticked (\checkmark) by the testee were to be taken into consideration and the weights were to be assigned regarding the responses obtained for each situation The sum of all the weights assigned would be the total anxiety score of the individual

Item Analysis :

The major objectives of Item Analysis are the improvement of total score reliability or of total score validity, or both, and the achievement of better item sequences and types of score distributors

For the present study, at first the scores were arranged in a descending order Then from the academic achievement scores of the students they were segregated as high group and low group students Then the scores of top 27% of students and bottom 27% of students were determined Then they were arranged in tabulated form From this tabulation, at first 't' test analysis for each item was done

For the item analysis, mean of High group (M_1) and the mean of Low group (M_2) , standard deviation of High group (SD_1) and the standard deviation of Low group (SD_2) and the validity of High group (V_1) and the validity of Low group (V_2) were calculated Thus t-test was performed to get the 't' values

| TA | High | | | Low | | | MD | | т | Sig. level |
|------|-------|-------|------|------|------|------|-------|----|------|------------|
| Item | M1 | SD1 | V1 | M2 | SD2 | V2 | | ** | • | ~~~~ |
| 1 | 3 37 | 1 14 | 1 29 | 2 22 | 1 27 | 161 | 1 15 | 54 | 4 95 | ** |
| 2 | 4 37 | 1 00 | 0 99 | 2 83 | 1 53 | 2 33 | 1 54 | 54 | 6 20 | ** |
| 3 | 2 04 | 1 15 | 1 32 | 2 04 | 1 20 | 1 43 | 0 00 | 54 | 0 00 | NS |
| 4 | 4 00 | 1 33 | 1 77 | 2 31 | 1 53 | 2 33 | 1 69 | 54 | 6 11 | ** |
| 5 | 2 70 | 1 21 | 1 46 | 2 11 | 1 22 | 1 50 | 0.59 | 54 | 2 53 | * |
| 6 | 4 04 | 1 32 | 1 73 | 1 96 | 1 12 | 1 24 | 2 07 | 54 | 8 83 | ** |
| 7 | 2 37 | 1 17 | 1 37 | 1 89 | 1.02 | 1 04 | 0 48 | 54 | 2 28 | * |
| 8 | 3 91 | 1 36 | 1 86 | 3 13 | 1 47 | 2 15 | 0 78 | 54 | 2 85 | ** |
| 9 | 4 15 | 1 25 | 1 56 | 2 70 | 1 62 | 2 63 | 1 44 | 54 | 5 19 | ** |
| 10 | 2 87 | 1 23 | 1 51 | 2 57 | 1 09 | 1 19 | 0 30 | 54 | 1 32 | NS |
| 11 | 2 91 | 1 28 | 1 63 | 2 33 | 1 39 | 1 92 | 0 57 | 54 | 2 24 | * |
| 12 | 4 46 | 0 95 | 0 89 | 2 87 | 1 54 | 2 38 | 1 59 | 54 | 6 47 | ** |
| 13 | 2 69 | 1 19 | 1 43 | 2 56 | 1 22 | 1 50 | 0.13 | 54 | 0 56 | NS |
| 14 | 4 48 | 1 21 | 1 46 | 4 09 | 1 15 | 1 33 | 0 39 | 54 | 1 71 | NS |
| 15 | 4 20 | 1 19 | 1 41 | 2 56 | 1 53 | 2 33 | 1 65 | 54 | 6 26 | ** |
| 16 | 2 76 | 1 32 | 1 73 | 2 22 | 1 19 | 1 42 | 0 54 | 54 | 2 22 | * |
| 17 | 3 76 | 1 26 | 1 58 | 2 44 | 1 50 | 2 25 | 1 31 | 54 | 4 93 | ** |
| 18 | 4 63 | 0 92 | 0 84 | 4 39 | 1 12 | 1 26 | 0 24 | 54 | 1 22 | NS |
| 19 | 4 46 | 1 09 | 1 20 | 3 81 | 1 29 | 1 66 | 0.65 | 54 | 2.82 | ** |
| 20 | 4 37 | 1 03 | 1 07 | 4 09 | 1 23 | 1 52 | 0 28 | 54 | 1 27 | NS |
| 21 | 4 13 | 1 13 | 1 28 | 2 93 | 1 40 | 1 96 | 1 20 | 54 | 4 91 | ** |
| 22 | 2 50 | 1 4 4 | 2 07 | 2 02 | 1 16 | 1 34 | 0 48 | 54 | 1 92 | NS |
| 23 | 4 4 1 | 0 98 | 0 96 | 2 31 | 1 36 | 1 84 | 2.09 | 54 | 9 18 | ** |
| 24 | 4 19 | 1 17 | 1 36 | 2 48 | 1 48 | 2 18 | 1 70 | 54 | 6 65 | ** |
| 25 | 4 11 | 1 22 | 1 50 | 2 81 | 1 66 | 2 76 | 1 30 | 54 | 4 62 | ** |
| 26 | 4 48 | 0 97 | 0 93 | 2 59 | 1 49 | 2 21 | 1 89 | 54 | 7 83 | ** |
| 27 | 2 44 | 1 31 | 1 72 | 2 48 | 1 38 | 1 91 | -0 04 | 54 | 0 14 | NS |

Table 11 : t' test for Item Analysis for Test Anxiety

| Itom | Itom | | High | | Low | | | n | Т | Sıg. level |
|------|------|-------|------|------|------|-------|-------|----|------|------------|
| Item | M1 | SD1 | V1 | M2 | SD2 | V2 | | | | |
| 28 | 2 83 | 1 4 1 | 1 99 | 2 20 | 1 20 | 1 4 5 | 0 63 | 54 | 2 50 | * |
| 29 | 2 91 | 1 50 | 2 24 | 1 87 | 1 17 | 1 36 | 1 04 | 54 | 4 02 | ** |
| 30 | 3 00 | 1 58 | 2 49 | 3 33 | 1 50 | 2 26 | -0 33 | 54 | 1 12 | NS |
| 31 | 3 30 | 1 40 | 1 95 | 2 72 | 1 38 | 1 90 | 0 57 | 54 | 2 15 | * |
| 32 | 3 54 | 1 49 | 2 22 | 2 20 | 1 29 | 1 67 | 1 33 | 54 | 4 97 | ** |

M1= Mean for High Group M2 = Mean for Low Group MD = Mean Difference V2 = Variance for Low Group t at 0 05 = 1 98 SD1 = Standard Deviation for High Group
SD2 = Standard Deviation for Low Group
V1 = Variance for High Group
n = Total observations in each group
t at 0 01 = 2 62

*Sig at 0 05 level, ** Sig at 0 01 level, NS = Not Significant

Items Rejected after Item Analysis: 3, 10, 13, 14, 18, 20, 22, 27, 30

The individuals can be classified into five categories on the basis of the test anxiety scores An individual with an extremely high score or above the 75th percentile may be refereed on regarded as hyper test anxiety individual. The extremely low ² scores below 25th percentile may indicate person as under motivated. The middle group of scores will represent essentially normal individual.

3.12 Assembly of Test Items :

After the development of the working concept, the next stage in the construction and standardization of a test was the assembly of test items. At first, the test items are formed depending upon the pre-determined educational objectives During the formation of the test items, the mental abilities of the students and their experience should be considered. After the formation of different test items, they are assembled to form the test format. For the present study, the researcher had tried to form different test items after the development of the working concept.

3.13 Review and Verification of the Test Items :

To prepare a test format, it is necessary to compile a large number of items There may be some difficulties during the assembly of different test items To overcome these difficulties, revision and verification of the test items are necessary This can be done by the researcher or may be submitted to experts for their opinion and criticism The researcher, in the present study had tried to review and verify the test items himself and by the experts

3.14 Framing Final Test Format Combined for Instructional Effectiveness, Self-Concept and Test Anxiety :

After going through the item analysis, the number of items accepted were 37 items for Instructional Effectiveness, 32 items for Self-Concept and 23 items for Test Anxiety Scale Final test format was formed by the researcher with these items

3.15 Application of Test Format :

The final test format was then applied on 200 samples The scores thus collected were the final scores and was used by the researcher to find out the objectivity, validity, reliability, standard norms and statistical analysis

3.16 Determining Objectivity of the Tools :

Objectivity is considered as one of the important technical characteristics of a good questionnaire Objective tests always gives impersonal judgment, i.e., it indicates that the test is not biased, not influenced by examiner's opinion, attitude or judgment, i.e., a questionnaire must be impersonal. This test should have objectivity in construction, administration and scoring

3.17 Objectivity in Construction :

A questionnaire is said to have objectivity in construction when the items of questionnaire are selected in such a way that they give a reflection of their respective objectives

In the present study, content area was analyzed, objectives were determined and item were developed against each objective. Thus objectivity in construction was maintained

3.18 Objectivity in Administration :

Individuals response to a test are affected by his / her physical, psychological and environmental conditions In the present study the tools were administered on two occasions (test and re-test) Both the environmental and psychological conditions were controlled as far as possible. To maintain objectivity in administration, specific directions were given to each student on both the occasions. In this way, objectivity in administration of three tools were maintained

3.19 Objectivity in Evaluation :

A test is said to have objectivity in scoring when the scorer's personal judgment does not effect the scoring. In the present study, a scoring key was prepared on the basis of Likert's five point scale and the responses were scored on the basis of the key. Thus evaluation of the items of the questionnaire was made impersonal and objectivity in scoring was assured.

3.20 Determining Validity of the Tools :

The validity may be defined as the accuracy with which it measures that which it is intended to measure, or as the degree to which it approaches infallibility in measuring what is proposed to measure. In general, a tool is valid if it measures what it claims to measure

Validity may be classified into many types But among these, the given four types of validity are of vital importance

- **Content Validity :** It refers to the degree to which the tool actually measures or is specially related to the traits for which it was designed. Content validity is based upon careful examination of course text book, syllabi, objectives and the judgment of subject matter specialist. There is no numerical way to express it
- **Predictive Validity :** It refers to the usefulness of a test on predicting some future performance
- Current Validity : It refers to the usefulness of a test in closely relating to other measures, such as present academic grades or scores on another test of known validity

• **Construct Validity** : It is the degree to which scores on a test can be accounted for by the explanatory constructs of a sound theory It is thus concerned not only with test itself, but also with theory, which seeks to explain, or to account for the results, which are obtained when the test used

The present questionnaire which had been constructed by the investigator, certainly ensured high content validity, because it adequately covered the content and objectives of the present research in three different tools namely Instructional Effectiveness, Self-concept and Test Anxiety

It is important to note that the content validity of the questionnaire had been done on the basis of careful analysis by a number of scholars and subject experts

3.21 Determining Reliability of the Tools :

The reliability of a tool or test is usually expressed in terms of correlation coefficient (partial as well as multiple correlation) There are various types of reliability They are

- Test-Retest Reliability
- Equivalent or Parallel Forms of Reliability
- Internal consistency
 - > Split-half Technique
 - Kuder-Richardson Technique
 - Rulon and Flanagan Technique

But in the present study the researcher used only Test-Retest method to determine the reliability of the tool He administered the same test after an interval of 20 days The reliability of a tool is usually expressed in terms of correlation co-efficient The product moment correlation co-efficient of test-retest scores of 100 students are as follows

- a) Instructional Effectiveness = 0.87
- b) Self-concept = 0.89
- c) Test Anxiety = 0.91

Thus, the questionnaire is quite reliable

3.22 Administration of Questionnaire and Collection of Data :

After the construction and the standardization of the test items, the questionnaire was ready to use During the administration, the researcher had tried to maintain the followings

- The researcher tried to choose the respondent carefully, i.e., those persons who possessed the required information and were sufficiently interested to respond objectively
- To get better returns, the researcher had tried to send the request for getting the responses through the heads of the institutions
- The researcher tried to collect the name of the institutions and the students necessary for the purpose of classification
- The maximum time allotted to answer all the items was 40 minutes
- The researcher gave the required preliminary instructions to the students at the beginning of the administration

The researcher administered the questionnaire on 600 students (sample) The questionnaires were administered in the first and second week of April, 2012

3.23 Evaluation of the Answer Script through Scoring Technique :

After the completion of the final administration of the test, the answer scripts were evaluated The responses made by the students were scored according to the scoring guide. The researcher had followed the "Likert's Scaling Technique" which provided a 5 point scale and assigned each of the 5 positions a scale value. All favourable statements were scored from maximum to minimum as 5, 4, 3, 2, 1 and all unfavourable statements were scored from minimum to maximum as 1, 2, 3, 4, 5

3.24 Organization of Data :

The data collected with the help of the questionnaire, however reliable, valid and adequate, but unstructured and raw The collected data had little meaning to the investigator until they were arranged in some systematic way So, it was needed to be systematized and organized, i.e., edited, classified and tabulated before it could serve any worthwhile purpose Editing implies the checking of gathered data for accuracy, utility and completeness Classifying refers to dividing of data into different categories, classes or heads for use Tabulation denotes the recording of the classified material in accurate mathematical terms

3.25 Analysis of Data :

Analysis of data means studying the tabulated material in order to determine inherent facts or meanings. It involves breaking down existing complex parts into simple parts and putting the parts together in new arrangement for the purpose of interpretation A plan of analysis should be prepared in advance before the actual collection of data. A preliminary analysis on the skeleton plan should develop into a complete, final analysis – enlarged and reworked as and when necessary. But caution is necessary at every step. No similarities, differences, trends and outstanding component should go unnoticed. Larger divisions of material should be broken down into smaller units and rearranged in new combinations to discover new factors and relationships. Data should be studied from as many angles as possible to find out more new facts.

3.26 Interpretation of Data :

Interpretation is by no means a mechanical process. It calls for a critical examination of the gathered data

The purpose of interpretation is essentially one of the way of stating what the findings are It is the most important step in the total procedure of research and is purely subjective in nature An adequate knowledge, not only of techniques of research, but also of one's field of study, and a capacity to do careful and critical thinking are very essential to safeguard against misinterpretation





CHAPTER – IV GRAPHICAL ANALYSIS AND HYPOTHESES TESTING WITH INTERPRETATION

4.1 Instructional Effectiveness Scale :

A) Time Management :

Item 1 : Effective instruction has been given for a time bounded schedule in our regular classes of our University



From the graph it is observed that 82 50% traditional learners considered that time bounded schedule in our regular classes of our university was satisfactory and in the reverse 77 90% distance learners 'thought that time bounded schedule in their regular classes was almost effective but instruction for time management in traditional system was greater than distance learner expressed from the study



Item 2 : Instruction will be effective when each period is divided into two or more activities

From the graph it is observed that 77 50% traditional learners considered that each period was divided into two or more activities as a time management dimension of effective instruction was satisfactory and in the reverse 79 03% distance learners thought that each period was divided into two or more activities as a time management dimension of effective instruction was comfortable. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a huge percentage on each period divided into two or more activities as a time management dimension for effective instruction



Item 3 : In our institution time schedule of each period has been maintained carefully

From the graph it is observed that 91 67% traditional learners considered that time schedule of each period had been maintained carefully as a time management dimension of effective instruction was satisfactory and in the reverse 76 61% distance learners thought that time schedule of each period had been maintained carefully as a time management dimension of effective instruction was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on the time schedule of each period had been maintained carefully as a time management dimension for effective instruction



Item – 4 : Time consciousness of teachers makes instruction effective

From the graph it is observed that 90 83% traditional learners considered that time consciousness of teachers as a time management dimension of effective instruction was satisfactory and in the reverse 79 35% distance learners thought that time consciousness of teachers as a time management dimension of effective instruction was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on the time consciousness of teachers as a time management dimension for effective instruction



Item -5: In our classes teachers are usually started and finished the class in time

From the graph it is observed that 79 17% traditional learners considered that usually started and finished the class in time as a time management dimension of effective instruction is satisfactory and in the reverse 73 71% distance learners thought that usually started and finished the class in time as a time management dimension of effective instruction was comfortable. The percentage of traditional learners was somewhat greater but in the same time distance learners also showed a huge percentage on usually started and finished the class in time as a time management dimension for effective instruction



Item - 6 : Total learning time can help effective instruction

From the graph it is observed that 68 33% traditional learners considered that total learning time as a time management dimension of effective instruction was satisfactory and in the reverse 81 77% distance learners thought that total learning time as a time management dimension of effective instruction was comfortable. It was quite astonishing that percentage of traditional learners was somewhat greater than traditional learners but at the same time traditional learners also shows a huge percentage on total learning time as a time management dimension for effective instruction. The basic reason was that in distance mode personal contact programme had been conducted in a very disciplined way and the effective learning time was limited but used in a very proper way.

B) Feedback :



Item – 7: Responses to the students are meaningful for effective instruction

From the graph it is observed that 86 67% traditional learners considered that meaningful responses of the students as a feedback dimension of effective instruction was satisfactory and in the reverse 74 68% distance learners thought that meaningful responses of the students as a feedback dimension of effective instruction was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage about meaningful responses of the students as a feedback dimension for effective instruction



Item - 8 : In classroom peer learning are not followed in our institutions

From the graph it is observed that 89 17% traditional learners considered that classroom peer learning as a feedback dimension of effective instruction was satisfactory and in the reverse 66 29% distance learners thought classroom peer learning as a feedback dimension of effective instruction was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on classroom peer learning as a feedback dimension for effective instruction.



Item -9: Discuss the week area of students by the teacher in our institution

From the graph it is observed that 86 67% traditional learners considered that discuss the week area of students as a feedback dimension of effective instruction was satisfactory and in the reverse 68 06% distance learners thought that discuss the week area of students as a feedback dimension of effective instruction was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on discuss the week area of students as a feedback dimension for effective instruction



Item – 10 : For effective instruction teacher discuss appropriately each answer of students

From the graph it is observed that 88 33% traditional learners considered that discuss appropriately each answer of students as a feedback dimension of effective instruction was satisfactory and in the reverse 75 97% distance learners thought that discuss appropriately each answer of students as a feedback dimension of effective instruction was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on discuss appropriately each answer of students as a feedback dimension for effective instruction.



Item - 11 : In classroom teacher help, feedback and important role to impart lesson

From the graph it is observed that 81 67% traditional learners considered that help feedback and important role to impart lesson as a feedback dimension of effective instruction was satisfactory and in the reverse 82 74% distance learners thought that help feedback and important role to impart lesion as a feedback dimension of effective instruction was comfortable. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a huge percentage on help, feedback and important role to impart lesson as a feedback dimension for effective instruction





From the graph it is observed that 69 17% traditional learners considered that evaluate the whole instruction in which portion was unclear to students as a feedback dimension of effective instruction was satisfactory and in the reverse 72 26% distance learners thought that evaluate the whole instruction in portion that was unclear to students as a feedback dimension of effective instruction was comfortable. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a huge percentage





From the graph it is observed that 65 00% traditional learners considered that clear and exact instruction as a strategy dimension of effective instruction was satisfactory and in the reverse 78 71% distance learners thought that clear and exact instruction as a strategy dimension of effective instruction was comfortable. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a huge percentage on clear and exact instruction as a strategy dimension for effective instruction



Item - 14 : For effective instruction teacher uses up-to-date and analytic examples to make the class interesting

From the graph it is observed that 97.50% traditional learners considered that up to date and analytic examples to make the class interesting as a strategy dimension of effective instruction was satisfactory and in the reverse 83 71% distance learners thought that up-to-date and analytic examples to make the class interesting as a strategy dimension of effective instruction was comfortable. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a huge percentage on up-to-date and analytic examples to make the class interesting as a strategy dimension for effective instruction



Item - 15: For effective instruction attendance of student is most important

From the graph it is observed that 85 00% traditional learners considered that attendance of student as a strategy dimension of effective instruction was satisfactory and in the reverse 64 03% distance learners thought that attendance of student as a strategy dimension of effective instruction. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage in this item.



Item – 16 : In our classroom teachers use educational technologies to explain their points

From the graph it is observed that 94 17% traditional learners considered that use of educational technologies as a strategy dimension of effective instruction and in the reverse 64 03% distance learners thought that use of educational technologies as a strategy dimension of effective instruction. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage in this item.


Item -17: In our classroom most of the teachers simplify a complex concept for the students

From the graph it is observed that 86 67% traditional learners considered that simple presentation of lesson as a strategy dimension of effective instruction and in the reverse 80 65% distance learners thought that simple presentation of lesson as a strategy dimension of effective instruction. The percentage of traditional learners was better than the distance learners



Item – 18 : In our class teachers use motivational word to make effective instruction

From the graph it is observed that 66 67% traditional learners considered that use motivational word as a strategy dimension of effective instruction and in the reverse 71 29% distance learners thought that use motivational word as a strategy dimension of effective instruction. The percentage of distance learners was better than the traditional learners in this item

D) Mastery of the Subject Matter :



Item - 19: In our class teachers well prepared in every period

From the graph it is observed that 83 33% traditional learners considered that teachers well prepared in every period for effective instruction and in the reverse 80 65% distance learners thought that teachers were well prepared in every period. It was concluded that both traditional learners and distance groups were nearly same in this item.



Item - 20 : Our class teachers use important points in a lesson to make effective instruction

From the graph it is observed that 70 83% traditional learners considered that teachers used important points in a lesson as a mastery of the subject matter dimension of effective instruction and in the reverse 80 32% distance learners thought that The percentage of distance learners was better from the traditional learners in this item The greater value of distance learners probably due to the invited expert teachers from various university was greater in number than that of traditional one



Item – 21 : Most of the teacher do not explain the instruction at understandable level of student

From the graph it is observed that 88 33% traditional learners considered that teacher explains the instruction at understandable level of student as a mastery of the subject matter dimension of effective instruction and in the reverse 63 06% distance learners thought that The percentage of traditional learners was greater than the distance learners but till they had a mentionable percentage for better understanding



Item - 22 : Our classroom most of the teacher present logically question and up-to-date data

From the graph it is observed that 66 67% traditional learners considered that teachers present logically question and up to date data as a mastery of the subject matter dimension of effective instruction and in the reverse 79 19% distance learners thought that most of the teacher present logically question and up to date data. The percentage of distance learners was greater from the traditional learners and the reason was that teachers were giving their instructions in a more lucid way.



Item - 23 : In our class most of the teacher analyse the various type of questions of students

From the graph it is observed that 84 17% traditional learners considered that analyse the various type of question of students and in the reverse 73 55% distance learners thought that analyse the various type of question of students as a mastery of the subject matter dimension of effective instruction. The percentage of traditional learners is greater than the distance learners



Item - 24 : In our class teachers use simple language to make effective instruction

From the graph it is observed that 91 67% traditional learners considered that teachers use simple language to make effective instruction as a mastery of the subject matter dimension of effective instruction and in the reverse 81 94% distance learners thought that The percentage of traditional learners was greater than the distance learners



Item - 25 : In our institution every teacher does not use up-to-date material

From the graph it is observed that 85 83% traditional learners considered that every teacher does not use up-to-date material and in the reverse 62 26% distance learners thought that every teacher does not use up-to-date material as a mastery of the subject matter dimension of effective instruction. The percentage of traditional learners was greater from the distance learners

E) Organization :



Item – 26 : For effective instruction in a institution creative environment is most important

From the graph it is observed that 80 83% traditional learners considered that creative environment was most important for effective instruction and in the reverse 82 90% distance learners thought the same Both traditional and distance groups were nearly same



Item - 27 : In our institution clear objectives of lesson plan for effective instruction

From the graph it is observed that 89 17% traditional learners considered that clear objectives of lesson plan and in the reverse 77 58% distance learners thought that clear objectives of lesson plan as an organization dimension of effective instruction. The percentage of traditional learners was greater than the distance learners



Item - 28 : In our class organization of subject matter at the level of pupil IQ

From the graph it is observed that 88 33% traditional learners considered that organization of subject matter at the level of pupil IQ for effective instruction and in the reverse 65 00% distance learners thought that the same The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on the organization of subject matter at the level of pupil IQ for effective instruction

Graph 29 100% 89 17% 90% 74 03% 80% 70% Percentage of Scores 60% 50% 40% 30% 20% 10% 0% **Traditional Learners Distance Learners**

From the graph it is observed that 89 17% traditional learners considered that teacher, student, administrator everybody take responsibility and in the reverse 74 03% distance learners thought that teacher, student, administrator everybody take responsibility as a organization dimension of effective instruction. The percentage of traditional learners was greater from the distance learners

Item – 29 : For effective instruction in our institution teacher, student, administrator everybody take responsibility



Item - 30 : In our classroom uses of learning resource to make effective instruction

From the graph it is observed that 81.67% traditional learners considered that uses of learning resource and in the reverse 76 94% distance learners thought that uses of learning resource as a organization dimension of effective instruction. The percentage of traditional learners was greater than the distance learners



Item - 31 : In our institution have enough classroom area and proper student ratio for effective instruction

From the graph it is observed that 81 67% traditional learners considered that classroom area and student ratio for effective instruction was satisfactory and in the reverse 65 00% distance learners thought that the same The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on the classroom area and student ratio for effective instruction

F) Teacher-Student Relationship :





From the graph it is observed that 90 83% traditional learners considered that teacher-student relationship was an important factor for effective instruction and in the reverse 86 61% distance learners thought that Teacher-Student relationship was an important factor for effective instruction. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on the teacher-student relationship during instruction.



Item - 33 : Most of the teacher attentively listen the ideas of students

From the graph it is observed that 81 67% traditional learners considered attentively listen the ideas of students for effective instruction and in the reverse 76 61% distance learners thought that attentively listen the ideas of students for effective instruction. It was concluded that percentage of traditional was somewhat greater than the distance learners



Item - 34 : In our class teacher respects students' individuality to impart lesson

From the graph it is observed that 80 83% traditional learners considered that teacher respects students' individuality as a teacher-student relationship dimension of effective instruction and in the reverse 72 10% distance learners thought that teacher respects students' individuality for effective instruction. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on the teacher respects students' individuality for effective individuality for effectiveness.



Item - 35 : For effective teaching most of the teachers are not motivating students in the classroom situation

From the graph it is observed that 91 67% traditional learners considered that teachers were not motivating students as a teacher-student relationship dimension of effective instruction and in the reverse 61 61% distance learners thought that teachers were not motivating students for effective instruction. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on the teachers were not motivating students.



Item – 36 : In our institution teacher maintains a friendly atmosphere inside the room

From the graph it is observed that 81 67% traditional learners agreed with the teacher maintains a friendly atmosphere inside the room for effective instruction and in the reverse 79.84% distance learners thought that item. Thus it was concluded that percentage of traditional learners was more greater than distance learners.



Item - 37 : In classroom teacher treats everyone to help write answer

From the graph it is observed that 81 67% traditional learners considered that teacher treats everyone to help write answer for effective instruction and in the reverse 75 16% distance learners thought that teacher treats everyone to help write answer Therefore it could be interpreted that percentage of traditional learners was greater than distance learners

4.2 Self-Concept Scale :

A) Physical :





From the graph it was clear that 75.83% traditional learners considered that personality of physical appearance for Self-concept was satisfactory and in the reverse 73.06% distance learners thought that personality of physical appearance for Self-concept was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on the personality of physical appearance for Self-concept.



Item - 2: What do you think about your appearance?

From the graph it was clear that 70 00% traditional learners considered that physical appearance for Self-concept was satisfactory and in the reverse distance 73 06% learners thought that physical appearance for Self-concept was comfortable The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on the physical appearance for Self-concept



Item - 3 : How do you find yourself in doing physical work ?

From the graph it is observed that 75 83% traditional learners considered that physical work for Self-concept was satisfactory and in the reverse distance 73 06% learners thought that physical work for Self-concept was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on the physical work for Self-concept.



Item - 4 : How do you like your physical smartness ?

From the graph it is observed that 70% traditional learners considered that physical smartness for Self-concept was satisfactory and in the reverse distance 73 71% learners thought that physical smartness for Self-concept was comfortable The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a huge percentage on the physical smartness for Selfconcept



Item - 5: How much are you satisfied with your physical fitness?

From the graph it is observed that 77 50% traditional learners considered that physical fitness for Self-Concept was satisfactory and in the reverse distance learners 77 26% thought that physical fitness for Self-concept was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on the physical fitness for Self-concept.



Item - 6 : How is your voice ?

From the graph it is observed that 65% traditional learners considered that voice for Self-concept was satisfactory and in the reverse 71 13% distance learners thought that voice for Self-concept was comfortable. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a huge percentage on the voice for Self-concept.



Item - 7: How do you find your health?

From the graph it is observed that 85.83% traditional learners considered that physical health for Self-concept was satisfactory and in the reverse 81 61% distance learners thought that physical health for Self-concept was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on the physical health for Self-concept



Item - 8: How much are you satisfied with your physical height?

From the graph it is observed that 73 33% traditional learners considered that height for Self-concept was satisfactory and in the reverse 71 13% distance learners thought that height for Self-concept was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on the height for Self-concept

B) Social :



Item – 9: Do your friends come to you for discussion?

From the graph it is observed that 71 67% traditional learners considered that discussion for social dimension of Self-Concept was satisfactory and in the reverse distance 71 61% learners thought that discussion for social dimension of Self-concept was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on the discussion for social dimension of Self-concept.



Item - 10 : Do you express your ideas frankly in the presence of others ?

From the graph it is observed that 72 50% traditional learners considered that frankly express ideas for social dimension of Self-concept was satisfactory and in the reverse 71 61% distance learners thought that frankly express ideas for social dimension of Self-concept was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on the frankly express ideas for social dimension of Self-concept.



Item - 11 : How do you like the company of others ?

From the graph it is observed that 67 50% traditional learners considered that company of others for social dimension of Self-Concept was satisfactory and in the reverse 68 71% distance learners thought that company of others for social dimension of Self-concept was comfortable. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a huge percentage on the company of others for social dimension of Self-Concept



Item - 12: Do you take part in organizing it when your classmates go to picnic

From the graph it is observed that 70 83% traditional learners considered that organizing part of picnic for social dimension of Self-Concept was satisfactory and in the reverse 71 61% distance learners thought organizing part of picnic for social dimension of Self-concept was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on organizing part of picnic for social dimension of Self-concept



Item - 13 : What will you do if you are doing some important work and your friends ask you to accompany them for a walk ?

From the graph it is observed that 72 50% traditional learners considered that accompany for social dimension of Self-concept was satisfactory and in the reverse 66 29% distance learners thought organizing accompany for social dimension of Selfconcept was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on accompany for social dimension of Self-concept.



Item - 14 : Do you hesitate in mixing with persons of opposite sex ?

From the graph it is observed that 80.00% traditional learners considered that mixing with persons of opposite sex for social dimension of Self-concept was satisfactory and in the reverse 79 19% distance learners thought organizing mixing with persons of opposite sex for social dimension of Self-Concept was comfortable. The percentage of traditional learners was some what greater but at the same time distance learners also showed a huge percentage on mixing with persons of opposite sex for social dimension of Self-concept



Item – 15 : You have to do four tasks – What will you do in the first place ?

From the graph it is observed that 100 00% traditional learners consider this social dimension of Self-Concept was satisfactory and in the reverse 97 90% distance learners thought this social dimension of Self-concept is comfortable. The percentage of traditional learners was some what greater but at the same time distance learners also showed a huge percentage on this social dimension of Self-concept.


Item - 16 : Do you like to do the work keeping in mind the desire of other?

From the graph it is observed that 76 67% traditional learners consider desire of other this social dimension of Self-concept was satisfactory and in the reverse 97 90% distance learners thought desire of other this social dimension of Self-Concept was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on this social dimension of Self-concept.



Item - 17: Do you participate in criticising others?

From the graph it is observed that 38.33% traditional learners considered that participate in criticising others for intellectual dimension of Self-concept was satisfactory and in the reverse 36.13% distance learners thought participate in criticising others for intellectual dimension of Self-concept is comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on this intellectual dimension of Self-concept.



Item - 18 : Do you behave abnormally also ?

From the graph it is observed that 52.50% traditional learners considered that behave abnormally for intellectual dimension of Self-concept was satisfactory and in the reverse 45% distance learners thought behave abnormally also for intellectual dimension of Self-concept was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on this intellectual dimension of Self-concept.



Item - 19: Do you think yourself as an experienced person?

From the graph it is observed that 53 33% traditional learners considered that yourself an experienced person for intellectual dimension of Self-concept was satisfactory and in the reverse 56 61% distance learners thought yourself an experienced person for intellectual dimension of Self-concept is comfortable. Though percentage of distance learners was somewhat greater but at the same time traditional learners also showed a huge percentage on this intellectual dimension of Self-concept.



Item - 20 : Do you think if you get an opportunity you can discover something new ?

From the graph it is observed that 81 67% traditional learners considered that opportunity to discover something new for intellectual dimension of Self-concept was satisfactory and in the reverse 73 55% distance learners thought opportunity to discover something new for intellectual dimension of Self-concept was comfortable The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on this intellectual dimension of Selfconcept



Item - 21 : Do you take care of the merits and demerits of a work before doing

From the graph it is observed that 78 33% traditional learners considered that merits and demerits of a work for intellectual dimension of Self-concept was satisfactory and in the reverse 74 52% distance learners thought that merits and demerits of a work for intellectual dimension of Self-concept was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on this intellectual dimension of Selfconcept



Item - 22: Are you more intelligent than your colleagues?

From the graph it is observed that 61 67% traditional learners considered that more intelligent than colleagues for intellectual dimension of Self-concept was satisfactory and in the reverse 61 45% distance learners thought that more intelligent than colleagues for intellectual dimension of Self-concept was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on this intellectual dimension of Self-concept



Item - 23 : Do you solve yourself the difficulties and problems of your studies ?

From the graph it is observed that 73 33% traditional learners considered that difficulties and problems of studies for intellectual dimension of Self-concept and in the reverse 67 74% distance learners thought that difficulties and problems of studies for intellectual dimension of Self-concept. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on this intellectual dimension of Self-concept



Item - 24 : How much do you attend to artistic aspect of the photograph while seeing or making it ?

From the graph it is observed that 65 00% traditional learners considered that attend to artistic aspect of the photograph for intellectual dimension of Self-concept was satisfactory and in the reverse 79.19% distance learners thought that attend to artistic aspect of the photograph for intellectual dimension of Self-concept was comfortable. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a huge percentage on this intellectual dimension of Self-concept

D) Emotional :



Item - 25 : How do you find your attitude ?

From the graph it is observed that 73 33% traditional learners considered that attitude as a emotional dimension of Self-concept was satisfactory and in the reverse distance 75 16% learners thought that attitude as a emotional dimension of Selfconcept was comfortable. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a huge percentage on this emotional dimension of Self-concept



Item – 26 : Do you think yourself one of the cheerful persons ?

From the graph it is observed that 70 83% traditional learners considered that cheerfulness as a emotional dimension of Self-concept was satisfactory and in the reverse 71 94% distance learners thought that cheerfulness as a emotional dimension of Self-concept was comfortable. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a huge percentage on this emotional dimension of Self-concept.



Item - 27 : Do you think yourself to be a cool-tempered man?

From the graph it is observed that 70 83% traditional learners considered that cool – tempered as a emotional dimension of Self-concept and in the reverse 65 32% distance learners thought that cool-tempered as a emotional dimension of Self-concept. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on this emotional dimension of Self-concept



Item - 28 : Do you insult others ?

From the graph it is observed that 87 50% traditional learners considered that insult others as a emotional dimension of Self-concept and in the reverse 89 68% distance learners thought that insulting of others as a emotional dimension of Selfconcept has been reported. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a huge percentage on this emotional dimension of Self-concept



Item - 29: Do you feel irritated if somebody finds fault with your work?

From the graph it is observed that 63 33% traditional learners consider feel irritated as a emotional dimension of Self-concept was satisfactory and in the reverse 65 00% distance learners thought that feel irritated as a emotional dimension of Self-concept. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a huge percentage on this emotional dimension of Self-concept



Item - 30 : Do you feel irritated while you face petty difficulties ?

From the graph it is observed that 69 17% traditional learners feel irritated to face petty difficulties as a emotional dimension of Self-concept was satisfactory and in the reverse 68 39% distance learners thought that they feel irritated to face petty difficulties as a emotional dimension of Self-concept was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on this emotional dimension of Self-concept.



Item - 31 : Are you introvert by nature ?

From the graph it is observed that 76 67% traditional learners considered that introvert nature as a emotional dimension of Self-concept was satisfactory and in the reverse 73 87% distance learners thought that introvert nature as a emotional dimension of Self-concept was comfortable Both of the traditional as well as distance learners in case of personality pattern show introvert in nature



Item - 32 : Are you curious to know the end while reading a novel or seeing a movie ?

From the graph it is observed that 82 50% traditional learners considered that curiosity as a emotional dimension of Self-concept was satisfactory and in the reverse 73 87% distance learners thought that curiosity as a emotional dimension of Selfconcept was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on this emotional dimension of Self-concept

4.3 Test Anxiety Scale :



Item - 1 : The closer I am to a major examination, the harder it is for me to concentrate on the material

From the graph it is observed that 66 67% traditional learners considered that concentrate on the material in the time of major examination feel anxiety and in the reverse 61 77% distance learners thought that concentrate on the material in the time of major examination feel anxiety. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on the concentrate on the material in the time of major examination feel anxiety.



Item – 2: When I study for my examination, I worry that I will not remember the material on the examination

From the graph it is observed that 29.17% traditional learners considered that I will not remember the material on the examination feel anxiety and in the reverse 30 16% distance learners thought that I will not remember the material on the examination feel anxiety. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a nearly same percentage on this test anxiety item.



Item - 3 : During important examinations, I think that I am doing awful or that I may fail

From the graph it is observed that 51 67% traditional learners considered that I am doing awful or that I may fail feel anxiety and in the reverse 52.90% distance learners thought that I am doing awful or that I may fail feel anxiety. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a nearly same percentage on this test anxiety item.



Item - 4 : I finally remember the answer to exam questions after the examination is already over

From the graph it is observed that 45% traditional learners considered that remember the answer to exam questions after the examination is already over feel anxiety and in the reverse 45 16% distance learners thought that remember the answer to exam questions after the examination is already over also feel anxiety. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a nearly same percentage on this test anxiety item



Item - 5: I worry so much before a major examination that I am too worn out to do my best on the examination

From the graph it is observed that 53 33% traditional learners considered that before a major examination that I am too worn out to do my best on the examination feel anxiety and in the reverse 56 61% distance learners thought that before a major exam that I am too worn out to do my best on the exam also feel anxiety. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a nearly same percentage on this test anxiety item



Item - 6: I find that my mind sometimes wanders when I am taking important examination

From the graph it is observed that 55% traditional learners considered that my mind sometimes wanders when I am taking important examination, feel anxiety and in the reverse 53 71% distance learners thought that my mind sometimes wanders when I am taking important exam, also feel anxiety. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a nearly same percentage on this test anxiety item.



Item -7: How do you feel after the date of the examination is announced?

From the graph it is observed that 51 67% traditional learners considered that feel after the date of the examination is announced, feel anxiety and in the reverse 47 58% distance learners thought that feel after the date of the examination is announced, also feel anxiety. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on this test anxiety item.



Item - 8: How do you feel on the day your examination begins?

From the graph it is observed that72 50% traditional learners considered that feel on the day your examination begins, realise anxiety and in the reverse 64 35% distance learners thought that feel on the day your examination begins, also realise anxiety. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on this test anxiety item



Item - 9: What ideas would divert your process of writing the answers of questions in the examination hall?

From the graph it is observed that 39 17% traditional learners considered that divert the process of writing answers of questions in the examination hall, feel anxiety and in the reverse 38 55% distance learners thought that divert the process of writing answers of questions in the examination hall, also feel anxiety. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a nearly same percentage on this test anxiety item

Item - 10 : How do you feel when somebody interfered you at the time you are preparing for your examination ?



From the graph it is observed that 57 50% traditional learners considered that somebody interfered at the time when preparing examination, feel anxiety and in the reverse 56 77% distance learners thought that somebody interfered at the time when preparing examination, also feel anxiety. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a nearly same percentage on this test anxiety item

Item - 11 : How do you feel if you are being helped by someone at the time when you are writing the answers in the examination hall ?



From the graph it is observed that 31 67% traditional learners considered that helped by someone at the time when you are writing the answers in the examination hall, feel anxiety and in the reverse 46 61% distance learners thought helped by someone at the time when you are writing the answers in the examination hall, also feel anxiety. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a huge percentage on this test anxiety item

Item - 12 : How do you feel at the moment you are asked by the invigilator in the examination hall to show your registration slip showing your roll number which you have forgotten to bring and without which you are not entitled to appear ?



From the graph it is observed that 46 67% traditional learners considered that at the moment you are asked by the invigilator in the examination hall to show your registration slip showing your roll number which you have forgotten to bring and without which you are not entitled to appear, feel anxiety and in the reverse distance 41 13% learners thought that at the moment you are asked by the invigilator in the examination hall to show your registration slip showing your roll number which you have forgotten to bring and without which you are not entitled to appear, also feel anxiety. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a nearly same percentage on this test anxiety item

Item – 13 : You thoroughly prepared some probable questions, but at the examination hall you ware surprised to see that none of the questions that you had learnt thoroughly. How will you feel at the moment ?



From the graph it is observed that 26 67% traditional learners considered that thoroughly prepared some probable questions, but at the examination hall you ware surprised to see that none of the questions that you had learnt thoroughly, feel anxiety and in the reverse 46 61% distance learners thought that thoroughly prepared some probable questions, but the examination hall you ware surprised to see that none of the questions that you had learnt thoroughly, also feel anxiety. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a nearly same percentage on this test anxiety item

Item - 14: What will you do if you would not prepare to your satisfaction for the commencing examination because of some reasons or other ?



From the graph it is observed that 34.17% traditional learners considered that not prepare to your satisfaction for the commencing examination because of some reasons or other, feel anxiety and in the reverse 34.03% distance learners thought that not prepare to your satisfaction for the commencing examination because of some reasons or other, also feel anxiety. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a nearly same percentage on this test anxiety item



Item - 15 : How will you feel if the invigilator speaks with you when you are busy in writing the answers in the examination hall ?

From the graph it is observed that 40 83% traditional learners considered that if the invigilator speaks with you when you are busy in writing the answers in the examination hall, feel anxiety and in the reverse 37.74% distance learners thought that if the invigilator speaks with you when you are busy in writing the answers in the examination hall, also feel anxiety. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on this test anxiety item.

Item - 16 : How do you feel if a large number of guests come to your home during the days you are preparing for your final examination ?



From the graph it is observed that 44 17% traditional learners considered that large number of guests come to your home during the days you are preparing for your final examination, feel anxiety an in the reverse 45 81% distance learners thought that large number of guests come to your home during the days you are preparing for your final examination, also feel anxiety. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a nearly same percentage on this test anxiety item



Item - 17 : How will you feel if you are caught by the invigilator using some unfair means during the examination ?

From the graph it is observed that 66 67% traditional learners considered that if you are caught by the invigilator using some unfair means during the examination, feel anxiety and in the reverse 60 81% distance learners thought that if you are caught by the invigilator using some unfair means during the examination, also feel anxiety So the percentage of observations highlighted that traditional learners had greater anxiety than distance learners



Item - 18 : How will you feel if the principal of your institution inspects your room during the examination ?

From the graph it is observed that 30 83% traditional learners considered that if the principal of your institution inspects your room during the examination, feel anxiety and in the reverse 31 45% distance learners thought that if the principal of your institution inspects your room during the examination, also feel anxiety Therefore it was interpreted that anxiety level of distance learners was greater than that of traditional learners



Item - 19 : How do you react to the situation in which your pen fails to write during the examination hour ?

From the graph it is observed that 27 50% traditional learners considered that the situation in which your pen fails to write during the examination hour, feel anxiety and in the reverse 32 90% distance learners thought that the situation in which your pen fails to write during the examination hour, also feel anxiety. So it was concluded that in this occasion distance learners felt greater anxiety




From the graph it is observed that 62 50% traditional learners considered that the moment when your result in which you have failed is declared, feel anxiety and in the reverse 68 55% distance learners thought that the moment when your result in which you have failed is declared, also feel anxiety. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a huge percentage on this test anxiety item



Item - 21 : How would you react if the supplementary answer book on your demand is supplied to you in a delayed way ?

From the graph it is observed that 56 67% traditional learners considered that if the supplementary answer book on demand is supplied to you in a delayed way, feel anxiety and in the reverse 56 29% distance learners thought that if the supplementary answer book on demand is supplied to you in a delayed way, also feel anxiety. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a nearly same percentage on this test anxiety item



Item - 22 : What will you do if during the examination time you fall ill ?

From the graph it is observed that 75 83% traditional learners considered that if during the examination time you fall ill, feel anxiety and in the reverse 73 71% distance learners thought that if during the examination time you fall ill, also feel anxiety. It was quite interesting that percentage of anxiety level of traditional learners was greater than distance learners though we had the common assumption that distance learners would have greater anxiety level

Item – 23 : How do you feel when you observe other students going through their notes and books very attentively and consciously even at the time when the first bell goes ?



From the graph it is observed that 65 83% traditional learners felt anxious when students going through their notes and books very attentively and consciously even at the time when the first bell goes just before examination starts, and in the reverse 61 13% distance learners thought that when other students going through their notes and books very attentively and consciously even at the time when the first bell goes, had the feeling of anxiety The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on this test anxiety item 4.4 Dimension-wise Comparison of Traditional Learners and Distance Learners :

INSTRUCTIONAL EFFECTIVENESS SCALE

A) Time Management :



From the graph it is observed that 81 67% traditional learners considered time management as a dimension of instructional effectiveness and in the reverse 78 06% distance learners thought time management as a dimension of instructional effectiveness. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on time management as a dimension of instructional effectiveness scale.





From the graph it is observed that 83 61% traditional learners considered feedback as a dimension of instructional effectiveness and in the reverse 73 33% distance learners thought feedback as a dimension of instructional effectiveness. In case of feedback, traditional learners in the usual way had greater percentage



C) Strategy :

From the graph it is observed that 82.50% traditional learners considered strategy as a dimension of instructional effectiveness and in the reverse 73 74% distance learners thought strategy as a dimension of instructional effectiveness. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on strategy as a dimension of instructional effectiveness scale



D) Mastery of the Subject Matter :

From the graph it is observed that 82 50% traditional learners considered mastery of the subject matter as a dimension of instructional effectiveness and in the reverse 73 74% distance learners thought mastery of the subject matter as a dimension of instructional effectiveness Information regarding mastery of subject matter showed traditional learners performed significantly better than traditional learners

E) Organization :



From the graph it is observed that 85.14% traditional learners considered organization as a dimension of instructional effectiveness and in the reverse 74 14% distance learners thought organization as a dimension of instructional effectiveness. It was observed that in case of organizational aspect, traditional learners were more capable than distance learners



F) Teacher-Student Relationship :

From the graph it is observed that 84 72% traditional learners considered teacher-student relationship as a dimension of instructional effectiveness and in the reverse 75 32% distance learners thought teacher-student relationship as a dimension of instructional effectiveness. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on teacher student relationship as a dimension of instructional effectiveness scale.



SELF-CONCEPT SCALE

From the graph it is observed that 74 17% traditional learners considered physical dimension of Self-concept and in the reverse 72 90% distance learners thought physical dimension of Self-concept On the basis of the percentage it was concluded that physical Self-concept is greater for traditional learners



From the graph it is observed that 76 46% traditional learners considered social dimension of Self-concept and in the reverse 73 39% distance learners thought social dimension of Self-concept Naturally traditional learners were having more social orientation than distance learners



C) Intellectual :

From the graph it is observed that 63 02% traditional learners considered intellectual dimension of Self-concept and in the reverse 61.77% distance learners thought intellectual dimension of Self-concept. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on intellectual dimension of Self-concept scale.



D) Emotional :

From the graph it is observed that 63 02% traditional learners considered emotional dimension of Self-concept and in the reverse 61 77% distance learners thought emotional dimension of Self-concept. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on emotional dimension of Self-concept scale



TEST ANXIETY SCALE

From the graph it is observed that 49.20% of traditional learners were having test anxiety and in the reverse 48 96% distance learners felt anxiety. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a nearly same percentage about total test anxiety scale. It is important to note that though distance learners are less interactive with the teachers and with the learning environment but distance learners were less anxious, reflected from the study.

4.5 Hypotheses Testing :

Hypothesis – 1 :

There is no significant mean difference regarding Time Management of Instructional Effectiveness between distance and traditional learners

Here the samples are large and independent and kurtosis is approximately normal. So the following formula is applied.

$$t = \frac{M_1 \sim M_2}{\sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}}}$$

where, M_1 = Mean for Traditional Learners

 M_2 = Mean for Distance Learners.

 σ_1 = Standard deviation of Traditional learners

 σ_2 = Standard deviation of Distance Learners

 N_1 and N_2 = Sizes of the Samples

| N ₁ | M ₁ | SD ₁ | N ₂ | M_2 | SD ₂ | df | t-value | Significance |
|-----------------------|-----------------------|-----------------|----------------|--------|-----------------|-----|---------|--------------|
| 200 | 165 26 | 14 27 | 200 | 148 40 | 9 50 | 398 | 15 71 | ** |

The obtained t value is 15 71 and the degree of freedom for use is 99 + 99 or 198 This is a two tailed test. For 198 df, the t critical value at 0.01 level is 2.60 Hence the obtained t-value is highly significant at 0.01 level. Therefore the hypothesis 1 is rejected. So it is concluded that instructional effectiveness with respect to time management, traditional learners is greater than distance learners.

Hypothesis – 2 :

There is no significant mean difference regarding Feedback of Instructional Effectiveness between distance and traditional learners

Here the samples are large and independent and kurtosis is approximately normal So the following formula is applied

$$t = \frac{M_1 \sim M_2}{\sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}}}$$

where, $M_1 =$ Mean for Traditional Learners

 M_2 = Mean for Distance Learners

 σ_1 = Standard deviation of Traditional learners

 σ_2 = Standard deviation of Distance Learners

 N_1 and $N_2 =$ Sizes of the Samples

| N ₁ | M ₁ | SD ₁ | N ₂ | M ₂ | SD ₂ | df | t-value | Significance |
|----------------|-----------------------|-----------------|----------------|-----------------------|-----------------|-----|---------|--------------|
| 200 | 179 56 | 7 08 | 200 | 168 88 | 8 46 | 398 | 11 04 | ** |

The obtained t value is 11 04 and the degrees of freedom for use in testing the t value is 100 + 100 - 2 = 198 For 198 df the t critical value for two tailed test at 0 01 level is 2 60 Therefore, the obtained t value is significant at 0 01 level and hence the hypothesis is rejected

Hypothesis – 3 :

There is no significant mean difference regarding Strategy of Instructional Effectiveness between distance and traditional learners

Here the samples are large and independent and kurtosis is approximately normal. So the following formula is applied

$$t = \frac{M_1 \sim M_2}{\sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}}}$$

where, $M_1 =$ Mean for Traditional Learners

 M_2 = Mean for Distance Learners

 σ_1 = Standard deviation of Traditional learners.

 σ_2 = Standard deviation of Distance Learners.

 N_1 and $N_2 =$ Sizes of the Samples

| N ₁ | M ₁ | SD ₁ | N ₂ | M_2 | SD ₂ | df | t-value | Significance |
|----------------|----------------|-----------------|----------------|--------|-----------------|-----|---------|--------------|
| 200 | 153.60 | 7 87 | 200 | 148 76 | 6 20 | 398 | 5 59 | ** |

The obtained t value is 5 59 and the degrees of freedom for use in testing the t value is 100 + 100 - 2 = 198 For 198 df the t critical value for two tailed test at 0 01 level is 2 60. So, the obtained t value is significant at 0 01 level and hence the hypothesis is rejected

Hypothesis – 4 :

There is no significant mean difference regarding Mastery of Subject Matter of Instructional Effectiveness between distance and traditional learners

Here the samples are large and independent and kurtosis is approximately normal So the following formula is applied

$$t = \frac{M_1 \sim M_2}{\sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}}}$$

where, $M_1 =$ Mean for Traditional Learners

 M_2 = Mean for Distance Learners

 σ_1 = Standard deviation of Traditional learners

 σ_2 = Standard deviation of Distance Learners

 N_1 and $N_2 = S_1 zes$ of the Samples

| N ₁ | M ₁ | SD ₁ | N ₂ | M ₂ | SD ₂ | df | t-value | Significance |
|----------------|-----------------------|-----------------|-----------------------|-----------------------|-----------------|-----|---------|--------------|
| 200 | 158 20 | 5 55 | 200 | 153 40 | 5 46 | 398 | | ** |

The obtained t value is 2 81 and the degrees of freedom for use in testing the t value is 198 For 198 degrees of freedom the t critical value for two tailed test at 0 01 level is 2 60 Therefore, the obtained t value is significant at 0 01 level and hence the hypothesis is rejected

Hypothesis – 5 :

There is no significant mean difference regarding Organization of Instructional Effectiveness between distance and traditional learners

Here the samples are large and independent and kurtosis is approximately normal So the following formula is applied

$$t = \frac{M_1 \sim M_2}{\sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}}}$$

where, $M_1 =$ Mean for Traditional Learners

 M_2 = Mean for Distance Learners.

 σ_1 = Standard deviation of Traditional learners

 σ_2 = Standard deviation of Distance Learners.

 N_1 and N_2 = Sizes of the Samples

| N ₁ | M ₁ | SD ₁ | N ₂ | M ₂ | SD ₂ | df | t-value | Significance |
|----------------|-----------------------|-----------------|----------------|----------------|-----------------|-----|---------|--------------|
| 200 | 167 26 | 15 28 | 200 | 148.40 | 10 50 | 398 | 15 71 | ** |

Therefore, the obtained t value is 15 71 and the degree of freedom for use is 198 This is a two tailed test For 198 df, the t critical value at 0 01 level is 2 60 Hence the obtained t-value is highly significant at 0 01 level. So the hypothesis is rejected

Hypothesis – 6:

There is no significant mean difference regarding Teacher Student Relationship of Instructional Effectiveness between distance and traditional learners

Here the samples are large and independent and kurtosis is approximately normal So the following formula is applied

$$t = \frac{M_1 \sim M_2}{\sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}}}$$

where, $M_1 =$ Mean for Traditional Learners

 M_2 = Mean for Distance Learners

 σ_1 = Standard deviation of Traditional learners

 σ_2 = Standard deviation of Distance Learners

 N_1 and $N_2 = S_1 zes$ of the Samples

| N ₁ | M ₁ | SD ₁ | N ₂ | M ₂ | SD ₂ | df | t-value | Significance |
|----------------|-----------------------|-----------------|----------------|----------------|-----------------|-----|---------|--------------|
| 200 | 171 52 | 7 11 | 200 | 158 88 | 8 23 | 398 | 23 78 | ** |

The obtained t value is 23 78 and the degrees of freedom for use in testing the t value is 100 + 100 - 2 = 198 For 198 df the t critical value for two tailed test at 0 01 level is 2 60 Therefore, the obtained t value is significant at 0 01 level and hence the hypothesis is rejected

Hypothesis – 7:

There is no significant mean difference regarding Physical dimension of Self-Concept between distance and traditional learners

Here the samples are large and independent and kurtosis is approximately normal So the following formula is applied

$$t = \frac{M_1 \sim M_2}{\sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}}}$$

where, $M_1 =$ Mean for Traditional Learners.

 M_2 = Mean for Distance Learners.

 σ_1 = Standard deviation of Traditional learners

 σ_2 = Standard deviation of Distance Learners

 N_1 and $N_2 = S_1 zes$ of the Samples

| N ₁ | M ₁ | SD ₁ | N ₂ | M ₂ | SD ₂ | df | t-value | Significance |
|----------------|----------------|-----------------|----------------|-----------------------|-----------------|-----|---------|--------------|
| 200 | 163 60 | 6 98 | 200 | 158 76 | 8 00 | 398 | 26 85 | ** |

The obtained t value is 26 85 and the degrees of freedom for use in testing the t value is 100 + 100 - 2 = 198 For 48 df the t critical value for two tailed test at 0 05 level is 2 01 Therefore, the obtained t value is significant at 0 05 level and hence the hypothesis is rejected

Hypothesis – 8 :

There is no significant mean difference regarding Social dimension of Self-Concept between distance and traditional learners

Here the samples are large and independent and kurtosis is approximately normal So the following formula is applied

$$t = \frac{M_1 \sim M_2}{\sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}}}$$

where, $M_1 =$ Mean for Traditional Learners

 M_2 = Mean for Distance Learners

 σ_1 = Standard deviation of Traditional learners.

 σ_2 = Standard deviation of Distance Learners

 N_1 and N_2 = Sizes of the Samples

| N ₁ | M ₁ | SD ₁ | N ₂ | M ₂ | SD ₂ | df | t-value | Significance |
|----------------|-----------------------|-----------------|----------------|----------------|-----------------|-----|---------|--------------|
| 200 | 165 20 | 6 65 | 200 | 143 40 | 7 63 | 398 | 24 90 | ** |

The obtained t value is 24 90 and the degrees of freedom for use in testing the t value is 198 For 198 degrees of freedom the t critical value for two tailed test at 0 01 level is 2 60 So, the obtained t value is significant at 0 01 level and hence the hypothesis is rejected

Hypothesis – 9:

There is no significant mean difference regarding Intellectual dimension of Self-Concept between distance and traditional learners

Here the samples are large and independent and kurtosis is approximately normal. So the following formula is applied

$$t = \frac{M_1 \sim M_2}{\sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}}}$$

where, $M_1 =$ Mean for Traditional Learners

 M_2 = Mean for Distance Learners

 σ_1 = Standard deviation of Traditional learners

 σ_2 = Standard deviation of Distance Learners

 N_1 and $N_2 =$ Sizes of the Samples.

| N ₁ | M ₁ | SD ₁ | N ₂ | M ₂ | SD ₂ | df | t-value | Significance |
|----------------|-----------------------|-----------------|----------------|-----------------------|-----------------|-----|---------|--------------|
| 200 | 165 56 | 5 01 | 200 | 168 88 | 6 23 | 398 | 17 64 | ** |

The obtained t value is 17 64 and the degrees of freedom for use in testing the t value is 100 + 100 - 2 = 198 For 198 df the t critical value for two tailed test at 0 01 level is 2 60. Therefore, the obtained t value is significant at 0 01 level and hence the hypothesis is rejected

Hypothesis – 10 :

There is no significant mean difference regarding Emotional dimension of Self-Concept between distance and traditional learners

Here the samples are large and independent and kurtosis is approximately normal. So the following formula is applied

$$t = \frac{M_1 \sim M_2}{\sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}}}$$

where, $M_1 =$ Mean for Traditional Learners

 M_2 = Mean for Distance Learners

 σ_1 = Standard deviation of Traditional learners

 σ_2 = Standard deviation of Distance Learners

 N_1 and $N_2 =$ Sizes of the Samples

| N ₁ | M ₁ | SD ₁ | N ₂ | M ₂ | SD ₂ | N ₁ | t-value | Significance |
|----------------|-----------------------|-----------------|----------------|-----------------------|-----------------|----------------|---------|--------------|
| 200 | 176.56 | 5 20 | 200 | 159.58 | 6 47 | 398 | 17 40 | ** |

The obtained t value is 17 40 and the degrees of freedom for use in testing the t value is 100 + 100 - 2 = 198 For 198 df the t critical value for two tailed test at 0 01 level is 2 60 Therefore, the obtained t value is significant at 0 01 level and hence the hypothesis is rejected

Hypothesis – 11 :

There is no significant mean difference regarding Test Anxiety between distance and traditional learners

Here the samples are large and independent and kurtosis is approximately normal. So the following formula is applied

$$t = \frac{M_1 \sim M_2}{\sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}}}$$

where, $M_1 =$ Mean for Traditional Learners

 M_2 = Mean for Distance Learners

 σ_1 = Standard deviation of Traditional learners

 σ_2 = Standard deviation of Distance Learners

 N_1 and $N_2 = S_1 zes$ of the Samples

| N ₁ | M ₁ | SD ₁ | N ₂ | M ₂ | SD ₂ | df | t-value | Significance |
|-----------------------|-----------------------|-----------------|----------------|-----------------------|-----------------|-----|---------|--------------|
| 200 | 175 66 | 7 25 | 200 | 162 55 | 6 67 | 398 | 11 17 | ** |

The obtained t value is 11 17 and the degrees of freedom for use in testing the t value is 198 For 198 df the t critical value for two tailed test at 0 01 level is 2 60 So, the obtained t value is significant at 0 01 level and hence the hypothesis is rejected





CHAPTER – V SUMMARY AND CONCLUSION

5.1 Introduction :

Different factors that influences students achievement is based on effective criteria of Instruction, Self-Concept of learners and obviously their mental disposition reflected through their Test Anxiety

Research shows that in many cases, classroom instruction is changing to better match the content found in traditional mode than distance mode Also, instruction focuses on test content or test-taking skills and ignores subject areas that are not on the test

In a study by Cankoy and Tut (2005), one group of fourth grade students spent 70% of class time on test-taking skills, a second group spent 50% of class time on test-taking skills, and a third group only spent 30% of class time on test-taking skills Test-taking skills included completing test questions from former tests, giving tests for drill, teaching procedures for answering multiple-choice questions, and memorizing rules. The study found that teaching students standard procedures to solve different types of math problems is not an effective approach to teach problem solving. Also, there was no difference in the three groups' performances on non-routine math story problems, and spending more class time on test-taking skills did not affect the non-routine story problem solving. To conclude, this study feels that tests and classroom instruction should emphasize and foster problem-solving skills more so than test-taking skills.

Therefore importance will be given to humanistic dimensions which can perform learners better The present study focuses the three basic parameters which resulted from the ground qualities of human being whether as a learner or as an instructor

5.2 Objectives of the Study :

- To study the Instructional Effectiveness in distance and traditional learners
- To develop a standardized questionnaire regarding Instructional Effectiveness, Test Anxiety and Self-Concept

- To study Test Anxiety and Self-Concept in a Comparative way at P G Level in distance and traditional learners
- To compare Instructional Effectiveness, Test Anxiety and Self-Concept between traditional learners and distance learners graphically
- To compare Instructional Effectiveness, Test Anxiety and Self-Concept in traditional and distance mode with respect to their dimension

5.3 Methodology :

The study is basically descriptive in nature and information is gathered through a standardized questionnaire Methodology is based on survey type of research followed by graphical analysis and t-test extracting from Instructional Effectiveness, Test Anxiety and Self-Concept questionnaire

5.4 Population :

The population of this study is the students of masters degree level in general university and distance mode university in West Bengal in a selective approach

5.5 Sampling for the Study :

Selected P G departments were used for sampling which is representative of the population having number 600 Here the nature of sampling is purposive type

5.6 Description of the Test :

The test was administrated under normal conditions in familiar classrooms of the students during class hour Written direction was given through questionnaire In each question there were selected options of which one was to be chosen

5.7 Nature of the Population :

By population the aggregate or the totality of objects or individual having one or more characteristics in common that are of interest to the researcher and regarding which inferences are to be made in a sampling study. It includes all those people or documents who are proposed to be covered under the scheme of study.

In the present research work, the researcher proposed to select students as

population of the study specially for first year M A in Education students under the different Universities of West Bengal in traditional and distance mode

5.8 Nature of Sample :

A sample is a small portion of a population selected for observation and analysis By observing the characteristics of the sample, one can make certain inferences about the characteristics of the population from which it has been drawn

For the present study the researcher had collected 600 samples from class M. A - 1 both from distance and traditional learners through purposive sampling

The researcher selected his sample through purposive sampling The sample was selected with a definite purpose in view and the choice of the sampling units depended entirely on the discretion and judgment of the investigator. In purposive sampling in educational problems, it is enough to select institutions or classrooms where the researcher could administer tests, make an interview according to the need of the researcher more systematically and easily

5.9 Construction of Questionnaire :

To prepare the questionnaire the researcher had gone through the detailed description of review of related studies He had analyzed the three different variables very minutely and consulted with the experts regarding various dimensions and drawbacks of the present study. The items of the questionnaire had been prepared on the basis of various information obtained from survey conducted at various university and distance education study centers. For each statement, a five point scale was provided to enable the respondents to give their opinion for each statement more objectively. Test Anxiety Scale was prepared with the help of Test Anxiety Questionnaire of Prof V P. Sharma, published by NPC of Agra Self-Concept Questionnaire was prepared with the help of Self-Concept Questionnaire of R K. Saraswat, published by NPC of Agra and then all the three variables of the questionnaire were locally standardized.

5.10 Principles of Preparing Questionnaire :

The questionnaire prepared by the researcher was in the restricted or closed

form The items of the questionnaire, i.e. the statements were prepared with the following principles in view

- The significance of the study was stated clearly
- The researcher had tried to seek information which was not obtained from other resources like books reports, records, etc
- The researcher had tried to make questions as short and clear as possible
- The researcher had tried to select each item that covered a single area
- The researcher had tried to arrange the item in categories
- The researcher had tried to avoid double-barreled questions
- The researcher had tried to minimize the double negative questions
- The researcher had tried to define terms that could easily be misinterpreted
- The researcher had tried to provide adequate number of alternatives against each question
- The researcher had tried to give point of reference
- The researcher had tried to design the question to get a complete response
- The researcher had taken due precaution to make it attractive in nature by properly arranging the items and getting them in clearly printed form

5.11 Standardization of the Questionnaire :

To construct and standardize the questionnaire for the students of first year at P G level and to measure the comparative parameters the researcher standardized the test

5.12 Developing Working Concept :

Before the construction of a test, developing of working concept is essential. It includes a detailed set of specification as to the purpose of the test and time, and the cost and recourses at the disposal of the researcher. The nature of the population for which the test is constructed has to be defined. The length of the test, type and nature of the test and method of scoring are some of the basic considerations which are to be planned in advance in this stage. For the present study the researcher tried to develop a working concept before proceeding with his research work.

5.13 Description of the Test :

The test was administrated under normal conditions in familiar classrooms of the students during class hour Written direction was given through questionnaire In each question there were selected options of which one was to be chosen

5.14 Limitations :

The present study combining Instructional Effectiveness, Test Anxiety and Self-Concept were difficult enough to investigate the matter in proper direction Environments were not flexible enough to provide all the information regarding their classes and other information in traditional and also in distance mode. Most of the determinants were extracted from the different studies available either in internet or the personal experience during survey work. The study was limited within a particular area where the survey was conducted and survey result was tested hypothetically and through graphical analysis. Other statistical analysis and correlative studies were limited by the researcher.

5.15 Analysis of the Results :

- The responses obtained both from the teachers as well as the students were tabulated systematically
- Likert's five point scale was used to measure the opinion of the sample
- Graphical representation was carried out to find out the responses of the teachers towards different items
- For the testing of different hypotheses, only t-test was executed
- In every case, decisions were taken at 0.05 and 0 01 level

5.16 Findings and Conclusion :

5.16.1 Findings and Interpretation from Graph :

Instructional Effectiveness

A) Time Management :

Item 1 Effective instruction has been given for a time bounded schedule in our regular classes of our University

From the graph it is observed that 82 50% traditional learners considered that

time bounded schedule in our regular classes of our university was satisfactory and in the reverse 77 90% distance learners thought that time bounded schedule in their regular classes was almost effective but instruction for time management in traditional system was greater than distance learner expressed from the study

Item 2 Instruction will be effective when each period is divided into two or more activities

From the graph it is observed that 77.50% traditional learners considered that each period was divided into two or more activities as a time management dimension of effective instruction was satisfactory and in the reverse 79.03% distance learners thought that each period was divided into two or more activities as a time management dimension of effective instruction was comfortable. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a huge percentage on each period divided into two or more activities as a time management dimension for effective instruction

Item 3 In our institution time schedule of each period has been maintained carefully

From the graph it is observed that 91 67% traditional learners considered that time schedule of each period had been maintained carefully as a time management dimension of effective instruction was satisfactory and in the reverse 76 61% distance learners thought that time schedule of each period had been maintained carefully as a time management dimension of effective instruction was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on the time schedule of each period had been maintained carefully as a time management dimension for effective instruction. Item -4 Time consciousness of teachers makes instruction effective.

From the graph it is observed that 90 83% traditional learners considered that time consciousness of teachers as a time management dimension of effective instruction was satisfactory and in the reverse 79 35% distance learners thought that time consciousness of teachers as a time management dimension of effective instruction was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on the time consciousness of teachers as a time management dimension for effective instruction

Item -5 In our classes teachers are usually started and finished the class in time

From the graph it is observed that 79 17% traditional learners considered that usually started and finished the class in time as a time management dimension of effective instruction is satisfactory and in the reverse 73 71% distance learners thought that usually started and finished the class in time as a time management dimension of effective instruction was comfortable. The percentage of traditional learners was somewhat greater but in the same time distance learners also showed a huge percentage on usually started and finished the class in time as a time management dimension for effective instruction

Item -6 Total learning time can help effective instruction

From the graph it is observed that 68.33% traditional learners considered that total learning time as a time management dimension of effective instruction was satisfactory and in the reverse 81 77% distance learners thought that total learning time as a time management dimension of effective instruction was comfortable. It was quite astonishing that percentage of traditional learners was somewhat greater than traditional learners but at the same time traditional learners also shows a huge percentage on total learning time as a time management dimension for effective instruction. The basic reason was that in distance mode personal contact programme had been conducted in a very disciplined way and the effective learning time was limited but used in a very proper way. In traditional mode time given in instruction was somewhat flexible and not properly supervised

B) Feedback :

Item -7 Responses to the students are meaningful for effective instruction

From the graph it is observed that 86 67% traditional learners considered that meaningful responses of the students as a feedback dimension of effective instruction was satisfactory and in the reverse 74 68% distance learners thought that meaningful

responses of the students as a feedback dimension of effective instruction was comfortable The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage about meaningful responses of the students as a feedback dimension for effective instruction

Item -8 In classroom peer learning are not followed in our institutions

From the graph it is observed that 89 17% traditional learners considered that classroom peer learning as a feedback dimension of effective instruction was satisfactory and in the reverse 66.29% distance learners thought classroom peer learning as a feedback dimension of effective instruction was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on classroom peer learning as a feedback dimension for effective instruction

Item -9 Discuss the week area of students by the teacher in our institution

From the graph it is observed that 86 67% traditional learners considered that discuss the week area of students as a feedback dimension of effective instruction was satisfactory and in the reverse 68 06% distance learners thought that discuss the week area of students as a feedback dimension of effective instruction was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on discuss the week area of students as a feedback dimension for effective instruction.

Item – 10 For effective instruction teacher discuss appropriately each answer of students

From the graph it is observed that 88 33% traditional learners considered that discuss appropriately each answer of students as a feedback dimension of effective instruction was satisfactory and in the reverse 75 97% distance learners thought that discuss appropriately each answer of students as a feedback dimension of effective instruction was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on discuss appropriately each answer of students as a feedback dimension for effective instruction

Item -11 · In classroom teacher help, feedback and important role to impart lesson

From the graph it is observed that 81.67% traditional learners considered that help feedback and important role to impart lesson as a feedback dimension of effective instruction was satisfactory and in the reverse 82 74% distance learners thought that help feedback and important role to impart lesion as a feedback dimension of effective instruction was comfortable. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a huge percentage on help, feedback and important role to impart lesson as a feedback dimension for effective instruction

Item – 12 In classroom teacher evaluate the whole instruction in portion that is unclear to students ?

From the graph it is observed that 69 17% traditional learners considered that evaluate the whole instruction in which portion was unclear to students as a feedback dimension of effective instruction was satisfactory and in the reverse 72 26% distance learners thought that evaluate the whole instruction in portion that was unclear to students as a feedback dimension of effective instruction was comfortable. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a huge percentage

C) Strategy :

Item – 13 In our institution most of the teacher imparts clear and exact instruction

From the graph it is observed that 65 00% traditional learners considered that clear and exact instruction as a strategy dimension of effective instruction was satisfactory and in the reverse 78 71% distance learners thought that clear and exact instruction as a strategy dimension of effective instruction was comfortable. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a huge percentage on clear and exact instruction as a strategy dimension for effective instruction Item – 14 For effective instruction teacher uses up-to-date and analytic examples to make the class interesting

From the graph it is observed that 97 50% traditional learners considered that up to date and analytic examples to make the class interesting as a strategy dimension of effective instruction was satisfactory and in the reverse 83 71% distance learners thought that up-to-date and analytic examples to make the class interesting as a strategy dimension of effective instruction was comfortable. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a huge percentage on up-to-date and analytic examples to make the class interesting as a strategy dimension for effective instruction

Item -15 For effective instruction attendance of student is most important

From the graph it is observed that 85 00% traditional learners considered that attendance of student as a strategy dimension of effective instruction was satisfactory and in the reverse 64 03% distance learners thought that attendance of student as a strategy dimension of effective instruction. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage in this item.

Item – 16 In our classroom teachers use educational technologies to explain their points

From the graph it is observed that 94 17% traditional learners considered that use of educational technologies as a strategy dimension of effective instruction and in the reverse 64 03% distance learners thought that use of educational technologies as a strategy dimension of effective instruction. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage in this item.

Item – 17 In our classroom most of the teachers simplify a complex concept for the students

From the graph it is observed that 86 67% traditional learners considered that simple presentation of lesson as a strategy dimension of effective instruction and in

the reverse 80 65% distance learners thought that simple presentation of lesson as a strategy dimension of effective instruction. The percentage of traditional learners was better than the distance learners

Item -18 In our class teachers use motivational word to make effective instruction

From the graph it is observed that 66 67% traditional learners considered that use motivational word as a strategy dimension of effective instruction and in the reverse 71 29% distance learners thought that use motivational word as a strategy dimension of effective instruction. The percentage of distance learners was better than the traditional learners in this item

D) Mastery of the Subject Matter :

Item – 19. In our class teachers well prepared in every period

From the graph it is observed that 83 33% traditional learners considered that teachers well prepared in every period for effective instruction and in the reverse 80 65% distance learners thought that teachers were well prepared in every period. It was concluded that both traditional learners and distance groups were nearly same in this item.

Item – 20 Our class teachers use important points in a lesson to make effective instruction

From the graph it is observed that 70 83% traditional learners considered that teachers used important points in a lesson as a mastery of the subject matter dimension of effective instruction and in the reverse 80 32% distance learners thought that The percentage of distance learners was better from the traditional learners in this item The greater value of distance learners probably due to the invited expert teachers from various university was greater in number than that of traditional one

Item -21 Most of the teacher do not explain the instruction at understandable level of student

From the graph it is observed that 88 33% traditional learners considered that teacher explains the instruction at understandable level of student as a mastery of the

subject matter dimension of effective instruction and in the reverse 63 06% distance learners thought that The percentage of traditional learners was greater than the distance learners but till they had a mentionable percentage for better understanding

Item – 22 Our classroom most of the teacher present logically question and up-todate data

From the graph it is observed that 66 67% traditional learners considered that teachers present logically question and up to date data as a mastery of the subject matter dimension of effective instruction and in the reverse 79 19% distance learners thought that most of the teacher present logically question and up to date data. The percentage of distance learners was greater from the traditional learners and the reason was that teachers were giving their instructions in a more lucid way.

Item – 23 : In our class most of the teacher analyse the various type of questions of students

From the graph it is observed that 84 17% traditional learners considered that analyse the various type of question of students and in the reverse 73 55% distance learners thought that analyse the various type of question of students as a mastery of the subject matter dimension of effective instruction. The percentage of traditional learners is greater than the distance learners

Item – 24 In our class teachers use simple language to make effective instruction

From the graph it is observed that 91 67% traditional learners considered that teachers use simple language to make effective instruction as a mastery of the subject matter dimension of effective instruction and in the reverse 81 94% distance learners thought that The percentage of traditional learners was greater than the distance learners

Item -25 · In our institution every teacher does not use up-to-date material

From the graph it is observed that 85 83% traditional learners considered that every teacher does not use up-to-date material and in the reverse 62 26% distance learners thought that every teacher does not use up-to-date material as a mastery of the
subject matter dimension of effective instruction. The percentage of traditional learners was greater from the distance learners

E) Organization :

Item – 26 For effective instruction in a institution creative environment is most important

From the graph it is observed that 80.83% traditional learners considered that creative environment was most important for effective instruction and in the reverse 82 90% distance learners thought the same Both traditional and distance groups were nearly same

Item -27 · In our institution clear objectives of lesson plan for effective instruction

From the graph it is observed that 89 17% traditional learners considered that clear objectives of lesson plan and in the reverse 77 58% distance learners thought that clear objectives of lesson plan as an organization dimension of effective instruction The percentage of traditional learners was greater than the distance learners

Item $-28 \cdot \text{In our class organization of subject matter at the level of pupil IQ}$

From the graph it is observed that 88 33% traditional learners considered that organization of subject matter at the level of pupil IQ for effective instruction and in the reverse 65 00% distance learners thought that the same The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on the organization of subject matter at the level of pupil IQ for effective instruction

Item – 29 For effective instruction in our institution teacher, student, administrator everybody take responsibility

From the graph it is observed that 89 17% traditional learners considered that teacher, student, administrator everybody take responsibility and in the reverse 74 03% distance learners thought that teacher, student, administrator everybody take responsibility as a organization dimension of effective instruction. The percentage of traditional learners was greater from the distance learners

Item -30 In our classroom uses of learning resource to make effective instruction

From the graph it is observed that 81 67% traditional learners considered that uses of learning resource and in the reverse 76 94% distance learners thought that uses of learning resource as a organization dimension of effective instruction. The percentage of traditional learners was greater than the distance learners.

Item – 31 In our institution have enough classroom area and proper student ratio for effective instruction

From the graph it is observed that 81 67% traditional learners considered that classroom area and student ratio for effective instruction was satisfactory and in the reverse 65 00% distance learners thought that the same The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on the classroom area and student ratio for effective instruction

F) Teacher-Student Relationship :

Item – 32 . For effective instruction Teacher-Student Relationship is an important factor

From the graph it is observed that 90 83% traditional learners considered that teacher-student relationship was an important factor for effective instruction and in the reverse 86 61% distance learners thought that Teacher-Student relationship was an important factor for effective instruction. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on the teacher-student relationship during instruction.

Item -33 · Most of the teacher attentively listen the ideas of students

From the graph it is observed that 81 67% traditional learners considered attentively listen the ideas of students for effective instruction and in the reverse 76 61% distance learners thought that attentively listen the ideas of students for effective instruction. It was concluded that percentage of traditional was somewhat greater than the distance learners

Item – 34 : In our class teacher respects students' individuality to impart lesson

From the graph it is observed that 80 83% traditional learners considered that teacher respects students' individuality as a teacher-student relationship dimension of effective instruction and in the reverse 72 10% distance learners thought that teacher respects students' individuality for effective instruction. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on the teacher respects students' individuality for effective individuality for effectiveness.

Item -35. For effective teaching most of the teachers are not motivating students in the classroom situation

From the graph it is observed that 91 67% traditional learners considered that teachers were not motivating students as a teacher-student relationship dimension of effective instruction and in the reverse 61 61% distance learners thought that teachers were not motivating students for effective instruction. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on the teachers were not motivating students

Item $-36 \cdot$ In our institution teacher maintains a friendly atmosphere inside the room

From the graph it is observed that 81 67% traditional learners agreed with the teacher maintains a friendly atmosphere inside the room for effective instruction and in the reverse 79 84% distance learners thought that item. Thus it was concluded that percentage of traditional learners was more greater than distance learners.

Item -37 In classroom teacher treats everyone to help write answer

From the graph it is observed that 81.67% traditional learners considered that teacher treats everyone to help write answer for effective instruction and in the reverse 75 16% distance learners thought that teacher treats everyone to help write answer Therefore it could be interpreted that percentage of traditional learners was greater than distance learners

Self-Concept Scale :

A) Physical :

Item -1 How do you find your personality ?

From the graph it was clear that 75 83% traditional learners considered that personality of physical appearance for Self-concept was satisfactory and in the reverse 73 06% distance learners thought that personality of physical appearance for Selfconcept was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on the personality of physical appearance for Self-concept

Item -2 What do you think about your appearance?

From the graph it was clear that 70 00% traditional learners considered that physical appearance for Self-concept was satisfactory and in the reverse distance 73.06% learners thought that physical appearance for Self-concept was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on the physical appearance for Selfconcept

Item -3 How do you find yourself in doing physical work?

From the graph it is observed that 75 83% traditional learners considered that physical work for Self-concept was satisfactory and in the reverse distance 73 06% learners thought that physical work for Self-concept was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on the physical work for Self-concept

Item – 4 How do you like your physical smartness?

From the graph it is observed that 70% traditional learners considered that physical smartness for Self-concept was satisfactory and in the reverse distance 73 71% learners thought that physical smartness for Self-concept was comfortable The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a huge percentage on the physical smartness for Selfconcept Item – 5 How much are you satisfied with your physical fitness?

From the graph it is observed that 77 50% traditional learners considered that physical fitness for Self-Concept was satisfactory and in the reverse distance learners 77 26% thought that physical fitness for Self-concept was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on the physical fitness for Self-concept

Item - 6 How is your voice ?

From the graph it is observed that 65% traditional learners considered that voice for Self-concept was satisfactory and in the reverse 71 13% distance learners thought that voice for Self-concept was comfortable. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a huge percentage on the voice for Self-concept.

Item -7 How do you find your health?

From the graph it is observed that 85 83% traditional learners considered that physical health for Self-concept was satisfactory and in the reverse 81 61% distance learners thought that physical health for Self-concept was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on the physical health for Self-concept

Item – 8 How much are you satisfied with your physical height?

From the graph it is observed that 73 33% traditional learners considered that height for Self-concept was satisfactory and in the reverse 71 13% distance learners thought that height for Self-concept was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on the height for Self-concept

B) Social :

Item -9 Do your friends come to you for discussion?

From the graph it is observed that 71 67% traditional learners considered that discussion for social dimension of Self-Concept was satisfactory and in the reverse

distance 71.61% learners thought that discussion for social dimension of Self-concept was comfortable The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on the discussion for social dimension of Self-concept

Item -10 Do you express your ideas frankly in the presence of others?

From the graph it is observed that 72 50% traditional learners considered that frankly express ideas for social dimension of Self-concept was satisfactory and in the reverse 71 61% distance learners thought that frankly express ideas for social dimension of Self-concept was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on the frankly express ideas for social dimension of Self-concept.

Item -11 How do you like the company of others ?

From the graph it is observed that 67 50% traditional learners considered that company of others for social dimension of Self-Concept was satisfactory and in the reverse 68 71% distance learners thought that company of others for social dimension of Self-concept was comfortable. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a huge percentage on the company of others for social dimension of Self-Concept

Item – 12 Do you take part in organizing it when your classmates go to picnic etc?

From the graph it is observed that 70 83% traditional learners considered that organizing part of picnic for social dimension of Self-Concept was satisfactory and in the reverse 71.61% distance learners thought organizing part of picnic for social dimension of Self-concept was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on organizing part of picnic for social dimension of Self-concept

Item – 13 What will you do if you are doing some important work and your friends ask you to accompany them for a walk ?

From the graph it is observed that 72 50% traditional learners considered that

accompany for social dimension of Self-concept was satisfactory and in the reverse 66 29% distance learners thought organizing accompany for social dimension of Selfconcept was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on accompany for social dimension of Self-concept

Item -14. Do you hesitate in mixing with persons of opposite sex ?

From the graph it is observed that 80 00% traditional learners considered that mixing with persons of opposite sex for social dimension of Self-concept was satisfactory and in the reverse 79.19% distance learners thought organizing mixing with persons of opposite sex for social dimension of Self-Concept was comfortable The percentage of traditional learners was some what greater but at the same time distance learners also showed a huge percentage on mixing with persons of opposite sex for social dimension of Self-concept.

Item - 15. You have to do four tasks - What will you do in the first place ?

From the graph it is observed that 100 00% traditional learners consider this social dimension of Self-Concept was satisfactory and in the reverse 97 90% distance learners thought this social dimension of Self-concept is comfortable. The percentage of traditional learners was some what greater but at the same time distance learners also showed a huge percentage on this social dimension of Self-concept.

Item -16 · Do you like to do the work keeping in mind the desire of other?

From the graph it is observed that 76 67% traditional learners consider desire of other this social dimension of Self-concept was satisfactory and in the reverse 97.90% distance learners thought desire of other this social dimension of Self-Concept was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on this social dimension of Self-concept

C) Intellectual :

Item – 17 Do you participate in criticising others?

From the graph it is observed that 38 33% traditional learners considered that participate in criticising others for intellectual dimension of Self-concept was satisfactory and in the reverse 36 13% distance learners thought participate in criticising others for intellectual dimension of Self-concept is comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on this intellectual dimension of Self-concept.

Item – 18 Do you behave abnormally also?

From the graph it is observed that 52 50% traditional learners considered that behave abnormally for intellectual dimension of Self-concept was satisfactory and in the reverse 45% distance learners thought behave abnormally also for intellectual dimension of Self-concept was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on this intellectual dimension of Self-concept.

Item - 19 Do you think yourself as an experienced person?

From the graph it is observed that 53.33% traditional learners considered that yourself an experienced person for intellectual dimension of Self-concept was satisfactory and in the reverse 56 61% distance learners thought yourself an experienced person for intellectual dimension of Self-concept is comfortable. Though percentage of distance learners was somewhat greater but at the same time traditional learners also showed a huge percentage on this intellectual dimension of Self-concept.

Item – 20 Do you think if you get an opportunity you can discover something new?

From the graph it is observed that 81 67% traditional learners considered that opportunity to discover something new for intellectual dimension of Self-concept was satisfactory and in the reverse 73 55% distance learners thought opportunity to discover something new for intellectual dimension of Self-concept was comfortable The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on this intellectual dimension of Selfconcept Item -21 Do you take care of the merits and demerits of a work before doing it?

From the graph it is observed that 78 33% traditional learners considered that merits and demerits of a work for intellectual dimension of Self-concept was satisfactory and in the reverse 74 52% distance learners thought that merits and demerits of a work for intellectual dimension of Self-concept was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on this intellectual dimension of Selfconcept

Item -22 Are you more intelligent than your colleagues ?

From the graph it is observed that 61.67% traditional learners considered that more intelligent than colleagues for intellectual dimension of Self-concept was satisfactory and in the reverse 61 45% distance learners thought that more intelligent than colleagues for intellectual dimension of Self-concept was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on this intellectual dimension of Self-concept

Item – 23 Do you solve yourself the difficulties and problems of your studies ?

From the graph it is observed that 73 33% traditional learners considered that difficulties and problems of studies for intellectual dimension of Self-concept and in the reverse 67 74% distance learners thought that difficulties and problems of studies for intellectual dimension of Self-concept. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on this intellectual dimension of Self-concept

Item – 24 How much do you attend to artistic aspect of the photograph while seeing or making it ?

From the graph it is observed that 65.00% traditional learners considered that attend to artistic aspect of the photograph for intellectual dimension of Self-concept was satisfactory and in the reverse 79 19% distance learners thought that attend to artistic aspect of the photograph for intellectual dimension of Self-concept was comfortable The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a huge percentage on this intellectual dimension of Self-concept

D) Emotional :

Item – 25 How do you find your attitude?

From the graph it is observed that 73 33% traditional learners considered that attitude as a emotional dimension of Self-concept was satisfactory and in the reverse distance 75 16% learners thought that attitude as a emotional dimension of Self-concept was comfortable. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a huge percentage on this emotional dimension of Self-concept.

Item -26 Do you think yourself one of the cheerful persons?

From the graph it is observed that 70 83% traditional learners considered that cheerfulness as a emotional dimension of Self-concept was satisfactory and in the reverse 71 94% distance learners thought that cheerfulness as a emotional dimension of Self-concept was comfortable. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a huge percentage on this emotional dimension of Self-concept.

Item -27 Do you think yourself to be a cool-tempered man?

From the graph it is observed that 70 83% traditional learners considered that cool – tempered as a emotional dimension of Self-concept and in the reverse 65 32% distance learners thought that cool-tempered as a emotional dimension of Self-concept The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on this emotional dimension of Self-concept

Item – 28 Do you insult others?

From the graph it is observed that 87 50% traditional learners considered that insult others as a emotional dimension of Self-concept and in the reverse 89 68% distance learners thought that insulting of others as a emotional dimension of Selfconcept has been reported The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a huge percentage on this emotional dimension of Self-concept

Item - 29 · Do you feel irritated if somebody finds fault with your work ?

From the graph it is observed that 63 33% traditional learners consider feel irritated as a emotional dimension of Self-concept was satisfactory and in the reverse 65% distance learners thought that feel irritated as a emotional dimension of Selfconcept The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a huge percentage on this emotional dimension of Self-concept

Item - 30 · Do you feel irritated while you face petty difficulties ?

From the graph it is observed that 69.17% traditional learners feel irritated to face petty difficulties as a emotional dimension of Self-concept was satisfactory and in the reverse 68 39% distance learners thought that they feel irritated to face petty difficulties as a emotional dimension of Self-concept was comfortable. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on this emotional dimension of Self-concept.

Item – 31 Are you introvert by nature?

From the graph it is observed that 76 67% traditional learners considered that introvert nature as a emotional dimension of Self-concept was satisfactory and in the reverse 73 87% distance learners thought that introvert nature as a emotional dimension of Self-concept was comfortable Both of the traditional as well as distance learners in case of personality pattern show introvert in nature

Item – 32. Are you curious to know the end while reading a novel or seeing a movie?

From the graph it is observed that 82 50% traditional learners considered that curiosity as a emotional dimension of Self-concept was satisfactory and in the reverse 73 87% distance learners thought that curiosity as a emotional dimension of Selfconcept was comfortable The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on this emotional dimension of Self-concept

Test Anxiety Scale :

Item – 1 The closer I am to a major examination, the harder it is for me to concentrate on the material

From the graph it is observed that 66 67% traditional learners considered that concentrate on the material in the time of major examination feel anxiety and in the reverse 61 77% distance learners thought that concentrate on the material in the time of major examination feel anxiety. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on the concentrate on the material in the time of major examination feel anxiety.

Item – 2 When I study for my examination, I worry that I will not remember the material on the examination

From the graph it is observed that 29 17% traditional learners considered that I will not remember the material on the examination feel anxiety and in the reverse 30 16% distance learners thought that I will not remember the material on the examination feel anxiety. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a nearly same percentage on this test anxiety item

Item – 3. During important examinations, I think that I am doing awful or that I may fail

From the graph it is observed that 51.67% traditional learners considered that I am doing awful or that I may fail feel anxiety and in the reverse 52 90% distance learners thought that I am doing awful or that I may fail feel anxiety. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a nearly same percentage on this test anxiety item.

Item - 4 : I finally remember the answer to exam questions after the examination is already over

From the graph it is observed that 45% traditional learners considered that remember the answer to exam questions after the examination is already over feel anxiety and in the reverse 45 16% distance learners thought that remember the answer to exam questions after the examination is already over also feel anxiety. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a nearly same percentage on this test anxiety item

Item – 5 I worry so much before a major examination that I am too worn out to do my best on the examination

From the graph it is observed that 53 33% traditional learners considered that before a major examination that I am too worn out to do my best on the examination feel anxiety and in the reverse 56 61% distance learners thought that before a major exam that I am too worn out to do my best on the exam also feel anxiety. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a nearly same percentage on this test anxiety item

Item – 6 I find that my mind sometimes wanders when I am taking important examination

From the graph it is observed that 55% traditional learners considered that my mind sometimes wanders when I am taking important examination, feel anxiety and in the reverse 53 71% distance learners thought that my mind sometimes wanders when I am taking important exam, also feel anxiety. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a nearly same percentage on this test anxiety item.

Item -7 How do you feel after the date of the examination is announced?

From the graph it is observed that 51 67% traditional learners considered that feel after the date of the examination is announced, feel anxiety and in the reverse 47 58% distance learners thought that feel after the date of the examination is announced, also feel anxiety. The percentage of traditional learners was somewhat

greater but at the same time distance learners also showed a huge percentage on this test anxiety item.

Item -8 How do you feel on the day your examination begins?

From the graph it is observed that72 50% traditional learners considered that feel on the day your examination begins, realise anxiety and in the reverse 64 35% distance learners thought that feel on the day your examination begins, also realise anxiety The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on this test anxiety item

Item – 9 What ideas would divert your process of writing the answers of questions in the examination hall ?

From the graph it is observed that 39 17% traditional learners considered that divert the process of writing answers of questions in the examination hall, feel anxiety and in the reverse 38 55% distance learners thought that divert the process of writing answers of questions in the examination hall, also feel anxiety. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a nearly same percentage on this test anxiety item

Item -10 How do you feel when somebody interfered you at the time you are preparing for your examination ?

From the graph it is observed that 57 50% traditional learners considered that somebody interfered at the time when preparing examination, feel anxiety and in the reverse 56 77% distance learners thought that somebody interfered at the time when preparing examination, also feel anxiety The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a nearly same percentage on this test anxiety item

Item -11 How do you feel if you are being helped by someone at the time when you are writing the answers in the examination hall ?

From the graph it is observed that 31 67% traditional learners considered that helped by someone at the time when you are writing the answers in the examination

hall, feel anxiety and in the reverse 46 61% distance learners thought helped by someone at the time when you are writing the answers in the examination hall, also feel anxiety. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a huge percentage on this test anxiety item.

Item – 12. How do you feel at the moment you are asked by the invigilator in the examination hall to show your registration slip showing your roll number which you have forgotten to bring and without which you are not entitled to appear ?

From the graph it is observed that 46 67% traditional learners considered that at the moment you are asked by the invigilator in the examination hall to show your registration slip showing your roll number which you have forgotten to bring and without which you are not entitled to appear, feel anxiety and in the reverse distance 41.13% learners thought that at the moment you are asked by the invigilator in the examination hall to show your registration slip showing your roll number which you have forgotten to bring and without which you are not entitled to appear, also feel anxiety The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a nearly same percentage on this test anxiety item

Item – 13 You thoroughly prepared some probable questions, but at the examination hall you ware surprised to see that none of the questions that you had learnt thoroughly How will you feel at the moment ?

From the graph it is observed that 26 67% traditional learners considered that thoroughly prepared some probable questions, but at the examination hall you ware surprised to see that none of the questions that you had learnt thoroughly, feel anxiety and in the reverse 46.61% distance learners thought that thoroughly prepared some probable questions, but the examination hall you ware surprised to see that none of the questions that you had learnt thoroughly, also feel anxiety. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a nearly same percentage on this test anxiety item Item – 14 : What will you do if you would not prepare to your satisfaction for the commencing examination because of some reasons or other ?

From the graph it is observed that 34 17% traditional learners considered that not prepare to your satisfaction for the commencing examination because of some reasons or other, feel anxiety and in the reverse 34 03% distance learners thought that not prepare to your satisfaction for the commencing examination because of some reasons or other, also feel anxiety. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a nearly same percentage on this test anxiety item

Item – 15 How will you feel if the invigilator speaks with you when you are busy in writing the answers in the examination hall ?

From the graph it is observed that 40.83% traditional learners considered that if the invigilator speaks with you when you are busy in writing the answers in the examination hall, feel anxiety and in the reverse 37 74% distance learners thought that if the invigilator speaks with you when you are busy in writing the answers in the examination hall, also feel anxiety. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on this test anxiety item.

Item – 16 How do you feel if a large number of guests come to your home during the days you are preparing for your final examination ?

From the graph it is observed that 44 17% traditional learners considered that large number of guests come to your home during the days you are preparing for your final examination, feel anxiety an in the reverse 45 81% distance learners thought that large number of guests come to your home during the days you are preparing for your final examination, also feel anxiety. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a nearly same percentage on this test anxiety item Item – 17 How will you feel if you are caught by the invigilator using some unfair means during the examination ?

From the graph it is observed that 66 67% traditional learners considered that if you are caught by the invigilator using some unfair means during the examination, feel anxiety and in the reverse 60 81% distance learners thought that if you are caught by the invigilator using some unfair means during the examination, also feel anxiety So the percentage of observations highlighted that traditional learners had greater anxiety than distance learners

Item – 18. How will you feel if the principal of your institution inspects your room during the examination ?

From the graph it is observed that 30 83% traditional learners considered that if the principal of your institution inspects your room during the examination, feel anxiety and in the reverse 31 45% distance learners thought that if the principal of your institution inspects your room during the examination, also feel anxiety Therefore it was interpreted that anxiety level of distance learners was greater than that of traditional learners

Item – 19 How do you react to the situation in which your pen fails to write during the examination hour ?

From the graph it is observed that 27 50% traditional learners considered that the situation in which your pen fails to write during the examination hour, feel anxiety and in the reverse 32 90% distance learners thought that the situation in which your pen fails to write during the examination hour, also feel anxiety So it was concluded that in this occasion distance learners felt greater anxiety

Item – 20 How will you feel at the moment when your result in which you have failed is declared ?

From the graph it is observed that 62 50% traditional learners considered that the moment when your result in which you have failed is declared, feel anxiety and in the reverse 68 55% distance learners thought that the moment when your result in which you have failed is declared, also feel anxiety. The percentage of distance learners was somewhat greater but at the same time traditional learners also showed a huge percentage on this test anxiety item

Item – 21 How would you react if the supplementary answer book on your demand is supplied to you in a delayed way ?

From the graph it is observed that 56 67% traditional learners considered that if the supplementary answer book on demand is supplied to you in a delayed way, feel anxiety and in the reverse 56 29% distance learners thought that if the supplementary answer book on demand is supplied to you in a delayed way, also feel anxiety. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a nearly same percentage on this test anxiety item

Item - 22 : What will you do if during the examination time you fall ill ?

From the graph it is observed that 75 83% traditional learners considered that if during the examination time you fall ill, feel anxiety and in the reverse 73 71% distance learners thought that if during the examination time you fall ill, also feel anxiety It was quite interesting that percentage of anxiety level of traditional learners was greater than distance learners though we had the common assumption that distance learners would have greater anxiety level

Item – 23 How do you feel when you observe other students going through their notes and books very attentively and consciously even at the time when the first bell goes ?

From the graph it is observed that 65 83% traditional learners felt anxious when students going through their notes and books very attentively and consciously even at the time when the first bell goes just before examination starts, and in the reverse 61 13% distance learners thought that when other students going through their notes and books very attentively and consciously even at the time when the first bell goes, had the feeling of anxiety. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on this test anxiety item.

5.16.2 Dimension-wise Comparison of Traditional Learners and Distance Learners :

INSTRUCTIONAL EFFECTIVENESS SCALE

A) Time Management :

From the graph it is observed that 81 67% traditional learners considered time management as a dimension of instructional effectiveness and in the reverse 78 06% distance learners thought time management as a dimension of instructional effectiveness. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on time management as a dimension of instructional effectiveness scale.

B) Feedback :

From the graph it is observed that 83 61% traditional learners considered feedback as a dimension of instructional effectiveness and in the reverse 73 33% distance learners thought feedback as a dimension of instructional effectiveness. In case of feedback, traditional learners in the usual way had greater percentage

C) Strategy :

From the graph it is observed that 82 50% traditional learners considered strategy as a dimension of instructional effectiveness and in the reverse 73 74% distance learners thought strategy as a dimension of instructional effectiveness. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on strategy as a dimension of instructional effectiveness considered effectiveness scale.

D) Mastery of the Subject Matter :

From the graph it is observed that 82 50% traditional learners considered mastery of the subject matter as a dimension of instructional effectiveness and in the reverse 73 74% distance learners thought mastery of the subject matter as a dimension of instructional effectiveness Information regarding mastery of subject matter showed traditional learners performed significantly better than traditional learners

E) Organization :

From the graph it is observed that 85 14% traditional learners considered organization as a dimension of instructional effectiveness and in the reverse 74 14% distance learners thought organization as a dimension of instructional effectiveness. It was observed that in case of organizational aspect, traditional learners were more capable than distance learners

F) Teacher-Student Relationship :

From the graph it is observed that 84 72% traditional learners considered teacher-student relationship as a dimension of instructional effectiveness and in the reverse 75 32% distance learners thought teacher-student relationship as a dimension of instructional effectiveness. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on teacher student relationship as a dimension of instructional effectiveness scale.

SELF-CONCEPT SCALE

A) Physical :

From the graph it is observed that 74 17% traditional learners considered physical dimension of Self-concept and in the reverse 72 90% distance learners thought physical dimension of Self-concept On the basis of the percentage it was concluded that physical Self-concept is greater for traditional learners

B) Social :

From the graph it is observed that 76.46% traditional learners considered social dimension of Self-concept and in the reverse 73 39% distance learners thought social dimension of Self-concept. Naturally traditional learners were having more social orientation than distance learners

C) Intellectual :

From the graph it is observed that 63 02% traditional learners considered intellectual dimension of Self-concept and in the reverse 61 77% distance learners thought intellectual dimension of Self-concept. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on intellectual dimension of Self-concept scale.

D) Emotional :

From the graph it is observed that 63 02% traditional learners considered emotional dimension of Self-concept and in the reverse 61 77% distance learners thought emotional dimension of Self-concept. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a huge percentage on emotional dimension of Self-concept scale

TEST ANXIETY SCALE

From the graph it is observed that 49 20% of traditional learners were having test anxiety and in the reverse 48 96% distance learners felt anxiety. The percentage of traditional learners was somewhat greater but at the same time distance learners also showed a nearly same percentage about total test anxiety scale. It is important to note that though distance learners are less interactive with the teachers and with the learning environment but distance learners were less anxious, reflected from the study

5.16.3 Hypotheses Testing :

Hypothesis – 1 :

There is no significant mean difference regarding Time Management of Instructional Effectiveness between distance and traditional learners

The obtained t value is 15 71 and the degree of freedom for use is 99 + 99 or 198 This is a two tailed test For 198 df, the t critical value at 0 01 level is 2 60 Hence the obtained t-value is highly significant at 0 01 level Therefore the hypothesis 1 is rejected So it was concluded that instructional effectiveness with respect to time management of traditional learners is greater than distance learners

Hypothesis – 2 :

There is no significant mean difference regarding Feedback of Instructional Effectiveness between distance and traditional learners

The obtained t value is 11 04 and the degrees of freedom for use in testing the t value is 100 + 100 - 2 = 198 For 198 df the t critical value for two tailed test at 0 01 level is 2.60 Therefore, the obtained t value is significant at 0 01 level and hence the hypothesis is rejected. Therefore traditional learners do better in feedback mechanism

Hypothesis – 3 :

There is no significant mean difference regarding Strategy of Instructional Effectiveness between distance and traditional learners

The obtained t value is 5 59 and the degrees of freedom for use in testing the t value is 100 + 100 - 2 = 198 For 198 df the t critical value for two tailed test at 0 01 level is 2 60. So, the obtained t value is significant at 0 01 level and hence the hypothesis is rejected

Hypothesis – 4 :

There is no significant mean difference regarding Mastery of Subject Matter of Instructional Effectiveness between distance and traditional learners

The obtained t value is 2 81 and the degrees of freedom for use in testing the t value is 198 For 198 degrees of freedom the t critical value for two tailed test at 0 01 level is 2 60 Therefore, the obtained t value is significant at 0 01 level and hence the hypothesis is rejected. In case of Mastery of subject matter traditional system getting more opportunity from their teaching learning system

Hypothesis – 5 :

There is no significant mean difference regarding Organization of Instructional Effectiveness between distance and traditional learners

Therefore, the obtained t value is 15 71 and the degree of freedom for use is 198 This is a two tailed test For 198 df, the t critical value at 0 01 level is 2 60 Hence the obtained t-value is highly significant at 0 01 level. So the hypothesis is rejected Organizational effectiveness is better in traditional system than in distance system

Hypothesis – 6 :

There is no significant mean difference regarding Teacher Student Relationship of Instructional Effectiveness between distance and traditional learners

The obtained t value is 23 78 and the degrees of freedom for use in testing the t value is 100 + 100 - 2 = 198 For 198 df the t critical value for two tailed test at 0 01 level is 2 60 Therefore, the obtained t value is significant at 0 01 level and hence the hypothesis is rejected.

Hypothesis – 7 :

There is no significant mean difference regarding Physical dimension of Self-Concept between distance and traditional learners

The obtained t value is 26 85 and the degrees of freedom for use in testing the t value is 100 + 100 - 2 = 198. For 48 df the t critical value for two tailed test at 0 05 level is 2 01 Therefore, the obtained t value is significant at 0 05 level and hence the hypothesis is rejected

Hypothesis – 8:

There is no significant mean difference regarding Social dimension of Self-Concept between distance and traditional learners

The obtained t value is 24.90 and the degrees of freedom for use in testing the t value is 198 For 198 degrees of freedom the t critical value for two tailed test at 0.01 level is 2.60 So, the obtained t value is significant at 0.01 level and hence the hypothesis is rejected

Hypothesis – 9:

There is no significant mean difference regarding Intellectual dimension of Self-Concept between distance and traditional learners.

The obtained t value is 17 64 and the degrees of freedom for use in testing the t value is 100 + 100 - 2 = 198 For 198 df the t critical value for two tailed test at 0 01 level is 2 60 Therefore, the obtained t value is significant at 0 01 level and hence the hypothesis is rejected Therefore it was be concluded that Self with respect to Intellectual dimension is better in case of traditional learners

Hypothesis – 10 :

There is no significant mean difference regarding Emotional dimension of Self-Concept between distance and traditional learners

The obtained t value is 17 40 and the degrees of freedom for use in testing the t value is 100 + 100 - 2 = 198 For 198 df the t critical value for two tailed test at 0 01 level is 2 60 Therefore, the obtained t value is significant at 0 01 level and hence the hypothesis is rejected

Hypothesis – 11 :

There is no significant mean difference regarding Test Anxiety between distance and traditional learners

The obtained t value is 11.17 and the degrees of freedom for use in testing the t value is 198 For 198 df the t critical value for two tailed test at 0 01 level is 2.60 So, the obtained t value is significant at 0 01 level and hence the hypothesis is rejected

5.17 Conclusion :

The investigator in his study has tried to revise thoroughly the application of the Instructional effectiveness, Self-Concept, Test Anxiety through a standardised questionnaire containing 92 test items. This task would help the teachers, educational thinkers, Educational planners and specialists to know the deficiencies of the present system of improving traditional and distance mode. Moreover, this study will help for the importance of Instructional effectiveness, Self-Concept, Test Anxiety in distance and traditional mode for their betterment. In the present time importance of distance mode has been gradually increasing but it is observed from the result maturity of the system both for distance mode and traditional mode are not satisfying enough almost all the points we consider. But in globalized pattern of Education system it is mandatory the quality of Education in both the system. Actually both the system is complementary and necessary arrangements to be initiated for their upliftment



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QUESTIONNAIRE

A STUDY ON INSTRUCTIONAL EFFECTIVENESS, SELF-CONCEPT AND TEST ANXIETY ON DISTANCE AND TRADITIONAL LEARNERS

By

4

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Researcher

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Directions

A Questionnaire has been prepared for conducting the research study for Ph D Degree In each question there are five options. You have to put ' \checkmark ' marks in each question according to your choice. Your information will be used only for research purpose and will be kept confidential.

| Name of the Student | | |
|-----------------------------|---------------------|------------|
| Subject | ·· · | |
| Class | Roll No | |
| Name of the Institution | | |
| District / Village / City | · · · | |
| | | |
| Marks in the Last Exami | nation : | |
| a) B Ed / Hons | FM. | Percentage |
| | or | |
| b) Marks obtained in the la | ast semester in P G | FΜ |
| | | |

INSTRUCTIONAL EFFECTIVENESS SCALE

| Time Management | | |
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| Item 1 Effective instruction has been given for a time bounded schedule in our | | |
| regular classes of our University | | |
| Fully Disagree Disagree No Opinion Agree Fully Agree | | |
| Item 2 · Instruction will be effective when each period is divided into two or more | | |
| activities | | |
| Fully Disagree Disagree No Opinion Agree Fully Agree | | |
| Item 3 : In our institution time schedule of each period has been maintained carefully | | |
| Fully Disagree Disagree No Opinion Agree Fully Agree | | |
| Item – 4. Time consciousness of teachers makes instruction effective | | |
| Fully Disagree Disagree No Opinion Agree Fully Agree | | |
| Item -5 In our classes teachers are usually started and finished the class in time | | |
| Fully Disagree Disagree No Opinion Agree Fully Agree | | |
| Item – 6 Total learning time can help effective instruction | | |
| Fully Disagree Disagree No Opinion Agree Fully Agree | | |
| B) Feedback : | | |
| Item -7 Responses to the students are meaningful for effective instruction | | |
| Fully Disagree Disagree No Opinion Agree Fully Agree | | |
| Item – 8. In classroom peer learning are not followed in our institutions | | |
| Fully Disagree Disagree No Opinion Agree Fully Agree | | |
| Item -9 Discuss the week area of students by the teacher in our institution | | |
| Fully Disagree Disagree No Opinion Agree Fully Agree | | |
| Item – 10 For effective instruction teacher discuss appropriately each answer of | | |
| students | | |
| Fully Disagree Disagree No Opinion Agree Fully Agree | | |

| Item -11 In classroom teacher help, feedback and important role to impart lesson | | |
|---|--|--|
| Fully Disagree Disagree No Opinion Agree Fully Agree | | |
| Item – 12 In classroom teacher evaluate the whole instruction in portion that is | | |
| unclear to students ? | | |
| Fully Disagree Disagree No Opinion Agree Fully Agree | | |
| C) Strategy : | | |
| Item -13 In our institution most of the teacher imparts clear and exact instruction | | |
| Fully Disagree Disagree No Opinion Agree Fully Agree | | |
| Item – 14 For effective instruction teacher uses up-to-date and analytic examples to | | |
| make the class interesting | | |
| Fully Disagree Disagree No Opinion Agree Fully Agree | | |
| Item – 15 For effective instruction attendance of student is most important | | |
| Fully Disagree Disagree No Opinion Agree Fully Agree | | |
| Item – 16 In our classroom teachers use educational technologies to explain their | | |
| points | | |
| Fully Disagree Disagree No Opinion Agree Fully Agree | | |
| Item -17 In our classroom most of the teachers simplify a complex concept for the | | |
| students | | |
| Fully Disagree Disagree No Opinion Agree Fully Agree | | |
| Item -18 In our class teachers use motivational word to make effective instruction | | |
| Fully Disagree Disagree No Opinion Agree Fully Agree | | |
| D) Mastery of the Subject Matter : | | |
| Item – 19 In our class teachers well prepared in every period | | |
| Fully Disagree Disagree No Opinion Agree Fully Agree | | |
| Item – 20 Our class teachers use important points in a lesson to make effective | | |
| instruction | | |
| Fully Disagree Disagree No Opinion Agree Fully Agree | | |
Most of the teacher do not explain the instruction at understandable level Item – 21 of student Fully Agree Fully Disagree Disagree | No Opinion Agree Item -22 Our classroom most of the teacher present logically question and up-todate data Disagree | Fully Agree Fully Disagree No Opinion Agree Item -23In our class most of the teacher analyse the various type of questions of students Fully Disagree Disagree No Opinion Agree Fully Agree Item -24 In our class teachers use simple language to make effective instruction Disagree Fully Disagree No Opinion Agree Fully Agree Item -25 · In our institution every teacher does not use up-to-date material Fully Disagree Disagree | No Opinion | Agree Fully Agree E) Organization : Item - 26 For effective instruction in a institution creative environment is most *important* Fully Disagree No Opinion Disagree | Agree Fully Agree Item -27 In our institution clear objectives of lesson plan for effective instruction Fully Disagree Disagree No Opinion Agree Fully Agree Item -28. In our class organization of subject matter at the level of pupil IQ Fully Disagree Disagree | No Opinion Agree Fully Agree Item -29 For effective instruction in our institution teacher, student, administrator everybody take responsibility Fully Disagree Disagree No Opinion Agree Fully Agree Item -30 In our classroom uses of learning resource to make effective instruction Fully Disagree Disagree No Opinion Agree Fully Agree

| Item -31 In our institution have enough classroom area and proper student ratio for |
|---|
| effective instruction |
| Fully Disagree Disagree No Opinion Agree Fully Agree |
| F) Teacher-Student Relationship : |
| Item – 32 For effective instruction Teacher-Student Relationship is an important |
| factor |
| Fully Disagree Disagree No Opinion Agree Fully Agree |
| Item -33 Most of the teacher attentively listen the ideas of students |
| Fully Disagree Disagree No Opinion Agree Fully Agree |
| Item – 34 In our class teacher respects students' individuality to impart lesson |
| Fully Disagree Disagree No Opinion Agree Fully Agree |
| Item -35 For effective teaching most of the teachers are not motivating students in |
| the classroom situation |
| Fully Disagree Disagree No Opinion Agree Fully Agree |
| Item -36 . In our institution teacher maintains a friendly atmosphere inside the room |
| Fully Disagree Disagree No Opinion Agree Fully Agree |
| Item -37 In classroom teacher treats everyone to help write answer |
| Fully Disagree Disagree No Opinion Agree Fully Agree |
| SELF-CONCEPT SCALE |
| A) Physical : |
| Item – 1 How do you find your personality ? |
| Most attractive Attractive Normal Unattractive Totally attractive |
| Item – 2 What do you think about your appearance ? |
| Very beautiful Beautiful Satisfactory Not Satisfactory Ugly |
| Item -3 How do you find yourself in doing physical work ? |
| Very Strong Strong Average Delicate Very Delicate |

| Item – 4 How do you like your physical smartness? |
|---|
| Very beautiful Beautiful Satisfactory Not Satisfactory Ugly |
| Item – 5 How much are you satisfied with your physical fitness ? |
| Fully Satisfied Satisfied Usually Satisfied Not So Satisfied Unsatisfied |
| Item $- 6$ How is your voice ? |
| Very Good Good Normal Not Good Unsatisfactory |
| Item – 7 How do you find your health ? |
| Very Good Good Average Weak Feeble |
| Item – 8 · How much are you satisfied with your physical height ? |
| Fully Satisfied Satisfied Normal Somewhat Dissatisfied Fully Dissatisfied |
| B) Social : |
| Item – 9. Do your friends come to you for discussion? |
| Always Usually Sometimes Usually Not Never |
| Item – 10 Do you express your ideas frankly in the presence of others ? |
| Always Mostly Normally Sometimes Never |
| Item – 11 How do you like the company of others ? |
| Always Good 🗌 Mostly Good 🗌 Usually Good 🗌 Sometimes Dislike 🗌 Never Like 🗌 |
| Item – 12 Do you take part in organizing it when your classmates go to picnic etc ? |
| Always Usually Generally Usually Not Never |
| Item – 13 What will you do if you are doing some important work and your friends |
| ask you to accompany them for a walk? |
| Will start immediately |
| Will go after thinking for sometime |
| Will keep silent |
| Will not go after thinking for sometime |
| Will refuse at once |

Item – 14 Do you hesitate in mixing with persons of opposite sex ? Do not hesitate at all Sometimes hesitate Generally do not hesitate Usually hesitate Always hesitate

- Item 15. You have to do four tasks (a) you have to call the doctor to show your sick brother, (b) you have to do the preparation for going out the next day, (c) you have to read novel, (d) the friend is going away, you have to go to see him. What will you do in the first place ? Will call the doctor to show the sick brother Will prepare for going out Will read novel Will go to see the friend Will go to see the friend
- Item 16 Do you like to do the work keeping in mind the desire of other ? Always do the work keeping in mind the desire of others Usually do the work keeping in mind the desires of others Generally do the work keeping in mind the desires of others Sometimes do not care for the liking of other Always do according to one's own will

C) Intellectual :

| Item – | 17. Do you participate in criticising others ? | | | | | | |
|--------|--|----------------|-------------------|------------------|----------|--|--|
| | Always 📃 | Mostly | Generally | Not Usually | Never | | |
| Item – | 18 . Do you beha | ve abnormally | also ⁹ | | | | |
| | Always 📃 | Mostly | Sometimes | Seldom | Never | | |
| Item – | 19 Do you think | yourself as an | experienced perso | on ⁹ | | | |
| Hıghly | Usually | Average 🗌 I | Less Experienced |] Without any ex | perience | | |

| Item – 20 Do you think if you get an opportunity you can discover something new ? Definitely Most Probably Probably Doubtful Not at all |
|--|
| Item – 21 Do you take care of the merits and demerits of a work before doing it ? Always Usually Generally Usually Not |
| Item – 22 Are you more intelligent than your colleagues ? Certainly More Usually Generally Less Not at all |
| Item – 23. Do you solve yourself the difficulties and problems of your studies ? Always Solve Usually Solve Generally Solve Usually can not Solve |
| Always help others |
| Item – 24 How much do you attend to artistic aspect of the photograph while seeing or making it ? Give very much attention |
| Give some attention Do not give any attention |
| D) Emotional : |
| Item – 25 How do you find your attitude ? Always Cheerful 🗌 Cheerful 🗌 Normal 🗌 Sometimes Unhappy 🗍 Always Unhappy 🗍 |
| Item - 26 Do you think yourself one of the cheerful persons ? Always Mostly Normally No Never |
| Item – 27 Do you think yourself to be a cool-tempered man ? Very much Usually Average Some Disturbed Much Disturbed |
| Item – 28 Do you insult others ? Never Not often Usually Mostly Always |
| Item – 29 Do you feel irritated if somebody finds fault with your work ? Never Usually Not Sometimes Usually Always |
| Item – 30 Do you feel irritated while you face petty difficulties ? Never Mostly Not Generally Sometimes Always |

| Item – 31 Are y | ou introvert by natur | e ? | | |
|-----------------|-----------------------|------------------|------------------|----------------|
| Not at all | Not much | Normal | Usually | Very much |
| Item – 32 Are | e you curious to know | ow the end while | e reading a nove | el or seeing a |
| mov | /1e [?] | | | |
| Always | Usually | Normally | No 📃 | Not at all |

TEST ANXIETY SCALE

| Item – | 1. | How | do | you | feel | when | major | examination | appears | closer | ? |
|--------|----|-----|----|-----|------|------|-------|-------------|---------|--------|---|
|--------|----|-----|----|-----|------|------|-------|-------------|---------|--------|---|

- a) I feel extremely glad
- b) No impact on me
- c) I will give too much attention to the subject matter
- d) I have some anxiety during exam preparation
- e) I will start weeping out of fear and anxiety, confusion and conflict

Item – 2 What will you do if answer to any question is not remembered in an examination hall ?

- a) I shall start to write answer of another question
- b) I shall try to remember answer, by reading the question repeatedly
- c) I shall try to remember answer the question by asking others
- d) I shall become anxious when I will not remember the answer
- e) I shall start weeping out of fear and anxiety, confusion and conflict
- Item -3 What do you feel during major examination ?
 - a) I feel extremely glad during examination
 - b) I do not have any feeling
 - c) I have some anxiety for finishing the answer script timely
 - d) I shall give more attention by observing my friends
 - e) I shall become anxious and feel afraid to fail in the examination

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- a) I shall be indifferent
- b) I am confident with my answers
- c) I shall feel bored and get anxious
- d) I shall feel anxious when I think failing examination
- e) I shall start weeping out of fear and anxiety, confusion and conflict
- Item -5 What do you feel if you do not give the best of your preparation?
 - a) I shall write the answer script normally
 - b) It will not influence me in any way
 - c) I shall try to concentrate myself more deeply
 - d) I am getting anxious about the result of examination
 - e) I shall start weeping out of fear and anxiety, confusion and conflict

Item – 6 What will you do during any major examination if your mind is unstable ?

- a) I shall be indifferent about the matter
- b) I shall write the answer script normally
- c) I shall be more attentive in writing answer script
- d) I shall get anxious by apprehending the appropriate answer of the question
- e) I shall get depressed by thinking to be failing in examination
- Item -7 How do you feel after the date of the examination is announced ?
 - a) There would not be any reaction
 - b) I will feel some excitement
 - c) I will feel extremely glad
 - d) I will feel anxious
 - e) I feel afraid of thinking about my preparation for the examination

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- Item 8 How do you feel on the day your examination begins ?
 - a) I feel extremely glad
 - b) I feel dilemmatic fear about the result of the examination, whether I will pass or fail
 - c) I feel angry with the person who will talk on this matter
 - d) I continue reading till the last moment I enter the examination hall
 - e) I feel extremely confused as if I have forgotten everything that I have learnt
- Item 9. What type of ideas would divert your process of writing the answers of questions in the examination hall ?
 - a) I am fully engrossed in writing the answers to questions
 - b) I often feel that I am writing everything correctly
 - c) I often experience anxiety that the examiner may get annoyed with my answers
 - d) My heart starts beating fast thinking that I may fail
 - e) I fail to write anything because of excessive fear and anxiety
- Item 10. How do you feel when somebody interfered you when you are preparing for your examination ?
 - a) I leave my study with pleasure and get into work assigned to me
 - b) I can not do any other work but to study for examination
 - c) I feel annoyed when I am interfered by assigning different tasks
 - d) My heart starts beating excessively of interference in my study
 - e) I feel anxious and my heart beat increases when I get afraid of not being able to prepare for the examination

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- a) I feel extremely pleased
- b) I feel ashamed of his foolishness
- c) I do not care to look at him
- d) I feel extremely angry for him
- e) I start forgetting because of anxiety, confusion and conflict
- Item 12. How do you feel at the moment you are asked by the invigilator in the examination hall to show your registration slip showing your roll number which you have forgotten to bring and without which you are not entitled to appear ?
 - a) Without any hesitation, I will tell that I have forgotten
 - b) I will not be confused at all
 - c) I will be a little restless
 - d) I will experience heart beating because of the fear of being turned out of the examination hall
 - e) I will start weeping out of fear, anxiety, confusion and conflict
- Item 13 : How will you feel when you thoroughly prepared some probable questions, but at the examination hall you see that none of the questions that are asked are learnt thoroughly ?
 - a) Without being disturbed, I will try to answer other questions
 - b) I will be extremely angry with the paper setter
 - c) I will be extremely disappointed
 - d) I will become anxious and feel afraid to fail in the examination
 - e) I will start weeping out of fear, anxiety, confusion, conflict, disappointment and disturbance

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- a) I will try to appear in the examination knowingly that I may not pass
- b) I will appear in the examination without any anxiety
- c) I will think all the time of not appearing at the examination
- d) I will try to avoid appearing at the examination having anxiety mixed with fear of failing in examination
- e) I will not appear at the examination with the excessive feeling of conflict and anxiety that I may fail in the examination
- Item 15 How will you feel if the invigilator speaks with you when you are busy in writing the answers in the examination hall ?
 - a) I will converse with him
 - b) Without conversing with him, I will be busy in writing the answers
 - c) I will be angry on him for conversing during examination
 - d) My heart would increase rapidly due to distraction of my attention and fear of failure
 - e) I will forget the answers of the questions because of excessive anger and anxiety interfering my writing
- Item 16 How do you feel if a large number of guests come to your home during the days you are preparing for your final examination ?
 - a) I will be glad to receive my guests
 - b) I will relax myself from the monotonous task of study and enjoy talking with them
 - c) I will be angry with them for the untimed arrival of guests
 - d) I will be extremely upset with the anxiety of appearing at the forthcoming examination
 - e) I feel forgetting whatever I learnt because of excessive anxiety and fear of failure

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- Item 17 How will you feel if you are caught by the invigilator using some unfair means during the examination ?
 - a) There will not be any effect of this upon me thinking it to be a routine matter
 - b) I will leave the examination hall without thinking any consequence
 - c) I will apologise about my misdeed
 - d) I will feel anxious whether I will fail in the examination
 - e) I will feel guilty and anxious as to how I will show my face to others
- Item 18. How will you feel if the Principal of your institution inspects your room during the examination ?
 - a) There will be no effect of this upon me considering it to be a routine matter
 - b) I will gaze at the teacher and listen carefully to the content being taught as soon as I see the Principal
 - c) I will be careful and cautious in my behaviour and to project myself as an ideal student
 - d) I will feel disturbed and depressed
 - e) I will start trembling with fear as the Principal enters my class thinking that I may not be able to answer his questions if he asks
- Item 19 How do you react to the situation in which your pen fails to write during the examination hour ?
 - a) Without being disturbed, I will borrow pen from another student and continue writing
 - b) I will try to continue writing with the same pen
 - c) I will be little disturbed as long as I can manage to get another one
 - d) I will feel extremely restless of my shortcomings during the examination and will get disturbed due to this unwanted situation
 - e) I will start weeping due to excessive fear of failure and will leave the examination hall

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- Item 20 How will you feel at the moment when your result is declared in which you have failed ?
 - a) I will not be sad at all
 - b) I will be disappointed for a moment
 - c) I will be angry with the examiners
 - d) I will experience excessive anxiety
 - e) I will not be able to go out of my house due to excessive anxiety, depression and shame
- Item 21 : How will you react if the supplementary answer book on your demand is supplied to you is delayed ?
 - a) I will look to and from meanwhile
 - b) I will wait patiently for the supply of supplementary answer book
 - c) I will stand up and insist upon giving me supplementary answer book quickly
 - d) I will resent upon the delay of giving the supplementary answer book to me
 - e) I will feel excessive anxious mixed with anger thinking that I may forget whatever if the supplementary answer book supplied is delayed
- Item 22 : What will you do if during the examination time you fall ill ?
 - a) I will be relieved from the burden of studying for the examination
 - b) I will think that I will get another chance to prepare better for the next examination
 - c) I will feel guilty of being fallen ill only during the examination days
 - d) I will feel anxious of being back by one year of my class fellows
 - e) I will try my to appear in the examination even of my sickness

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- a) I will tease at them
- b) I will feel anxious for coming examination seeing those students
- c) Without paying attention to them, I will enter the examination hall and take my seat
- d) I will ask them what important things they are studying at this time
- e) I feel forgetting everything that I learnt, out of fear and anxiety when I see them learning so attentively

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দুর্বাদ্য

A study of Instructional effectiveness, Self concept and Tes anxiety on distance and traditional learners.

কল্যানী বিশ্ববিদ্যালয়ের শিক্ষা বিভাগে Ph.D গবেষণা কাজের জন্য প্রশ্নপত্রটি শিক্ষার্থীদের কাছে প্রদত্ত হল।

গবেষক : গোকুল চন্দ্র পাত্র

1.

গবেষণা নির্দেষক : ডঃ দিব্যেন্দু ভট্টাচার্য্য অধ্যাপক, শিক্ষা বিভাগ, কল্যানী বিশ্ববিদ্যালয়

প্রয়োজনীয় নির্দেশনা ঃ

প্রতিটি প্রশ্নের জন্য গাঁচটি পছন্দের তালিকা দেওয়া আছে। তোমার পছন্দ মত উত্তরটির পাশে ''√" দাও।

শিক্ষার্থীদের প্রতিটি প্রশ্ন পড়ে তাদের নিজস্ব সঠিক মতামত স্পষ্ট ভাবে জানাতে হবে। স্বভাবিক কারণেই এ মতামতের গোপনিয়তা অবলম্বন করা হবে এবং কেবলমাত্র গবেষণা কাজে ব্যবহার করা হবে।

| ছাত্র/ছাত্রীর নাম | |
|---|------|
| বিষয় ক্রমিক নং | |
| প্রতিষ্ঠানের নাম | |
| জেলা/গ্রাম/শহর | |
| সর্বশেষ পরীক্ষায় প্রাপ্ত নম্বর ৪ | |
| ক). B.Ed / Hons পূর্ণ মানশতাংশ মান অথবা | |
| <u>খ</u>). স্নতকোত্তর বিভাগের শেষ সেমিষ্টারে প্রাপ্ত নম্বর পূর্ণ মান | •••• |

INSTRUCTIONAL EFFECTIVENESS

A) Time management

| ১) শ্রেণীকক্ষে কার্যকরী (effective)নির্দেশদানের (instruction) জন্য তোমাদের বিশ্ববিদ্যালয়ে প্রতিদিন নিদিষ্ট সময় ধরে পাঠ প্রদান করা হয়। বিশেষভাবে অসম্মত মতামত নেই সম্মত বিশেষভাবে অসম্মত সম্মত |
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| ২) পাঠদানের প্রতিটি পিরিওড্ কে দুইটি বা তিনিটি কার্য পদ্ধতিতে বিভক্ত করলে নির্দেশদান কার্যকরী হবে। |
| বিশেষভাবে 🔄 অসম্মত 🔄 মতামত নেই 🦳 সম্মত 🔄 বিশেষভাবে 🦳 অসম্মত সম্মত |
| ৩) তোমাদের বিশ্ববিদ্যালয়ে প্রতিটি পিরিওড নিদিষ্ট সময়ে শুরু হয়। |
| বিশেষভাবে 🔲 অসম্মত 🦳 মতামত নেই 🦳 সম্মত 🦳 বিশেষভাবে 🦳 অসম্মত সম্মত |
| ৪) শিক্ষকের সময় সচেতনাতা নির্দেশদানকে কার্যকরী করে তোলে। |
| বিশেষভাবে 🗌 অসম্মত 🦳 মতামত নেই 🦳 সম্মত 🗌 বিশেষভাবে 🦳 অসম্মত সম্মত |
| ৫) শ্রেণীকক্ষে তোমাদের শিক্ষক নির্দিষ্ট সময়ে পাঠদান শুরু ও শেষ করেন। বিশেষভাবে অসম্মত মতামত নেই সম্মত বিশেষভাবে অসম্মত সম্মত |
| ৬) বৎসরে মোট পাঠদানের সময় বাড়ালে নির্দেশদান কার্যকরী হবে। |
| বিশেষভাবে 📄 অসম্মত 🦳 মতামত নেই 🦳 সম্মত 🗌 বিশেষভাবে 🦳 অসম্মত সম্মত |
| B) Feedback ৭) কিছু শিক্ষার্থী যদি সঠিক উত্তর দানে সক্ষম হয় তবেই নির্দেশদান কার্যকরী হয়। |
| বিশেষভাবে 🗌 অসম্মত 🦳 মতামত নেই 🦳 সম্মত 🗌 বিশেষভাবে 💽 অসম্মত সম্মত |
| ৮) শ্রেণী শিক্ষায় সঙ্গী শিখন (peer learning) প্রাতিষ্ঠানিক ক্ষেত্রে হয় না বললেই চলে। বিশেষভাবে অসম্মত মতামত নেই সম্মত বিশেষভাবে অসম্মত সম্মত |

») তোমাদের বিশ্ববিদ্যালয়ের শিক্ষক-গন শিক্ষার্থীদের পাঠের দুর্বল অংশগুলির চিহ্নিতকরন করে নির্দেশদান করেন।

| বিশেষভাবে অসম্মত মতামত নেই সম্মত বিশেষভাবে অসম্মত সম্মত |
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| ১০) নির্দেশদানকে কার্যকরী করার জন্য শিক্ষক মহাশয় শিক্ষার্থীর প্রতিটি উত্তরের যথাযথ বিশ্লেষণ করেন। |
| বিশেষভাবে অসম্মত মতামত নেই সম্মত বিশেষভাবে অসম্মত সম্মত |
| ১১) শ্রেণীতে শিক্ষক, শিক্ষার্থীদের উত্তরদানে সহয়তা করেন এবং পঠন পাঠনে গুরুত্বপূর্ণ ভুমিকা নেন। |
| বিশেষভাবে অসম্মত মতামত নেই সম্মত বিশেষভাবে অসম্মত সম্মত |
| ১২) শ্রেণীকক্ষে পাঠদান শেষে শিক্ষাথীরা কোন অংশ বুঝতে পারছেনা, তার সামগ্রিক মূল্যায়ন শিক্ষক মহাশয় করেন। |
| বিশেষভাবে 🔲 অসম্মত 🦳 মতামত নেই 🦳 সম্মত 🦳 বিশেষভাবে 🦳 অসম্মত সম্মত |
| C) Strategy |
| ১৩) তোমাদের শিক্ষাপ্রতিষ্ঠানে বেশিরভাগ শিক্ষক পাঠ্য বিষয়ের স্পষ্ট ও সঠিক ব্যাখ্যা দিয়ে থাকেন। |
| বিশেষভাবে অসম্মত মতামত নেই সম্মত বিশেষভাবে অসম্মত |
| ১৪) পাঠে মনোযোগী করার জন্য শিক্ষক বাস্তব সম্মত উদাহরন এবং বিশ্লেষণধর্মী ব্যাখ্যা দিয়ে থাকেন যা কার্যকরী নির্দেশদানের জন্য অত্যন্ত গুরুত্বপূর্ন। |
| বিশেষভাবে অসম্মত মতামত নেই সম্মত বিশেষভাবে অসম্মত সম্মত |
| ১৫) শ্রেণীতে শিক্ষার্থীদের উপস্থিতির হার কার্যকরী নির্দেশদানকে বিশেষ ভাবে প্রভাবিত করে না। |
| বিশেষভাবে 📄 অসম্মত 🦳 মতামত নেই 🦳 সম্মত 🦳 বিশেষভাবে 🦳 অসম্মত সম্মত |

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১৬) ভোমাদের শ্রেণাতে শক্ষক মহাশয়গন পাঠ পারবৈশনে শিক্ষামূলক প্রযুক্তির ব্যবহার করেন না।

| বিশেষভাবে অসম্মত | অসম্মত যিতামত নেই | সম্মত 🔄 বিশেষভাবে 📃 সম্মত |
|-----------------------------|--|---|
| ১৭) শ্রেণিক | ক্ষে বেশিরভাগ শিক্ষক বিষয়বস্তুর সহজ সরল উপ | াস্থাপন করেন । |
| বিশেষভাবে অসম্মত | 🗌 অসম্মত 🦳 মতামত নেই 🦳 | সম্মত 🔄 বিশেষভাবে 📃 সম্মত |
| ১৮) তোমা তোলে । | দর শ্রেণীতে শিক্ষক মহাশয়গন উদ্দীপনাপূর্ন শব্দের | র ব্যবহার করেন, যা নির্দেশদানকে কর্যকরী করে |
| বিশেষভাবে অসম্মত | আসম্মত 🔄 মতামত নেই 🦳 | সম্মত 🔄 বিশেষভাবে 📃 সম্মত |
| | D) Mastery of the sul | bject matter |
| ১৯) বিশ্ববিদ | ্যালয়ের শিক্ষকেরা প্রতিটি পিরিওডের পরিকল্পিত | প্রস্তুতি নিয়ে আসেন। |
| বিশেষভাবে অসম্মত | আসম্মত 🔄 মতামত নেই 🦳 | সম্মত 🔄 বিশেষভাবে 📃 সম্মত |
| ২০) তোমাদে করেন, নির্দেশ | দর শ্রেণীতে শিক্ষক মহাশয়গন পাঠের গুরুত্বপুর্ন অ শদানকে কার্যকরী করার জন্য। | মংশগুলির (points) সংক্ষিপ্তকারে উপস্থাপন |
| বিশেষভাবে অসম্মত | ্র অসম্মত 🦳 মতামত নেই 🦳 | সম্মত 🔄 বিশেষভাবে 🔄 সম্মত |
| ২১) বেশিরত | চাগ শিক্ষক শিক্ষর্থীদের বোধগম্যতার স্তর অনুযায়ী | বিষয় বন্ডুর বিশ্লেষণ করেন না। |
| বিশেষভাবে অসম্মত | অসম্মত 📃 মতামত নেই 📃 | সম্মত বিশেষভাবে সম্মত |
| ২২) তোমাদে | নর মেণিকক্ষে বেশিরভাগ শিক্ষক যুক্তিপূর্ন প্রমের উ | উপস্থাপন ও বিশেষ বিশেষ তথ্য প্রদান করেন। |
| বিশেষভাবে অসম্মত | আসম্মত বিহামিত নেই | সম্মত বিশেষভাবে সম্মত |

্২৩) তোমাদের শ্রেণিকক্ষে বেশিরভাগ শিক্ষক শিক্ষার্থীদের বিভিন্ন প্রশ্নের বিশ্লেষণ-মূলক আলোচনা করেন ।

| বিশেষভাবে 🦳 অসম্মত 🦳 মতামত নেই 🦳 সম্মত 🗌 বিশেষভাবে 🦳 অসম্মত সম্মত |
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| ২৪) তোমাদের বিশ্ববিদ্যালয়ের শিক্ষক-গন বিষয় বস্তুর উপস্থাপনে সহজ ভাষার ব্যবহার করে যা নির্দেশদান কার্যকরী করে। |
| বিশেষভাবে অসম্মত মতামত নেই সম্মত বিশেষভাবে অসম্মত সম্মত |
| ২৫) শ্রেনিতে সমস্ত শিক্ষক শিক্ষিকা পাঠ সম্পর্কীত আধুনিক (up-to-date) তথ্য প্রদান করেন না। |
| বিশেষভাবে 🚺 অসম্মত 🦳 মতামত নেই 🦳 সম্মত 🗌 বিশেষভাবে 🦳 অসম্মত সম্মত |
| E) Organization |
| ২৬) বিশ্ববিদ্যালয়ে কার্যকরী নির্দেশদানের জন্য সৃজনশীল পরিবেশ অত্যন্ত অপরিহার্য। |
| বিশেষভাবে অসম্মত মতামত নেই সম্মত বিশেষভাবে অসম্মত সম্মত |
| ২৭) তোমাদের বিশ্ববিদ্যালয়ের কার্যকরী নির্দেশদানের জন্য পাঠ পরিকল্পনায় উদ্দেশ্যের স্পষ্টতা রয়েছে। |
| বিশেষভাবে অসম্মত মতামত নেই সম্মত বিশেষভাবে অসম্মত সম্মত |
| ২৮) তোমাদের শ্রেনিতে শিক্ষার্থীদের বৌদ্ধিক স্তর অনুযায়ী বিষয় বস্তুর সংগঠন হয়। |
| বিশেষভাবে অসম্মত মতামত নেই সম্মত বিশেষভাবে অসম্মত সম্মত |
| ২৯) তোমাদের বিশ্ববিদ্যালয়ে কার্যকরী নির্দেশদানের জন্য শিক্ষক, প্রশাসক, শিক্ষার্থী প্রত্যেকে যথাযথ দায়িত্ববোধ গ্রহন করেন। |
| বিশেষভাবে 🔄 অসম্মত 🦳 মতামত নেই 🦳 সম্মত 🗌 বিশেষভাবে 🦳 অসম্মত |

| ২০০০ জনে জনেজে, চালল সহায়দ সমজান (resource) নিদেশপানকে কাষকরা করে। |
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| বিশেষভাবে 🔄 অসম্মত 🦳 মতামত নেই 🦳 সম্মত 🗌 বিশেষভাবে 🦳 অসম্মত সম্মত |
| ৩১) তোমাদের বিশ্ববিদ্যালয়ে কার্যকরী নির্দেশদানের জন্য শ্রেনীকক্ষের আয়তন ও শিক্ষার্থীর সংখ্যা যথাযথ রয়েছে। |
| বিশেষভাবে অসম্মত মতামত নেই সম্মত বিশেষভাবে অসম্মত সম্মত |
| F) Teacher student relationship |
| ৩২) তোমাদের শ্রেনিতে নির্দেশদানকে কার্যকরী করার জন্য শিক্ষক শিক্ষাথীর সুসম্পর্ক একটি গুরুত্বপূর্ণ বিষয়। |
| বিশেষভাবে অসম্মত মতামত নেই সম্মত বিশেষভাবে অসম্মত সম্মত |
| ৩৩) শ্রেণিকক্ষে বেশিরভাগ শিক্ষক শিক্ষার্থীর চিন্তাভাবনা গুলিকে গ্রহন করে, যা কার্যকরী নির্দেশদানে জ্যাবন্ধিকে। |
| বিশেষভাবে অসম্মত মতামত নেই সম্মত বিশেষভাবে অসম্মত সম্মত |
| ৩৪) তোমাদের শ্রেনিতে প্রতিটি শিক্ষার্থীর ব্যক্তিসত্বার প্রতি মর্যদা দিয়ে শিক্ষক মহাশয়গন পাঠ প্রদান করেন। |
| বিশেষভাবে অসম্মত মতামত নেই সম্মত বিশেষভাবে অসম্মত |
| ৩৫) নির্দেশদানকে কার্যকরী করার জন্য বেশিরভাগ শিক্ষক শিক্ষার্থীদের সামগ্রিক উৎসাহ ভিত্তিক(motivation) পাঠ দান করেন না |
| বিশেষভাবে অসম্মত মতামত নেই সম্মত বিশেষভাবে অসম্মত সম্মত |
| ৩৬) তোমাদের শ্রেনিতে শিক্ষক মহাশয় বন্ধুত্বপূর্ন পরিবেশ সৃষ্টি করেন নর্দেশদানকে কার্যকরী করার জন্য। |
| বিশেষভাবে অসম্মত মতামত নেই সম্মত বিশেষভাবে অসম্মত সম্মত |
| ৩৭) শিক্ষক মহাশয়গন শ্রেনী কক্ষে প্রতিটি শিক্ষার্থীর সঠিক উত্তরদানে সহায়তা করেন। |
| বিশেষভাবে অসম্মত মতামত নেই সম্মত বিশেষভাবে অসম্মত সম্মত |

SELF CONCEPT

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A) Physical

| ১। তোমার ব্যক্তিত্বকে তুমি কিভাবে দেখতে চাও ? |
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| খুব আকর্ষনীয় 🦳 আকর্ষনীয় 📃 স্বাভাবিক 🦳 আকর্ষনহীন 🦳 সম্পূর্ণ আকর্ষনহীন 🦳 |
| ২। বন্ধুদের কাছে তোমার শারীরিক গঠনের গ্রহনযোগ্যতা কেমন ? |
| খুব সুন্দর 🦳 সন্তোষ জনক 🦳 সন্তোষ জনক নয় 🦳 কুৎসিৎ 🗌 |
| ৩। শারীরিক পরিশ্রম করার সময় তোমার কিরকম অনুভব হয় ? |
| খুব সক্ষম সক্ষম সাভাবিক দুর্বল খুব দুর্বল |
| ৪। তোমার শারীরিক সৌন্দর্য তুমি কিরকম পছন্দ করবে ? |
| খুব সুন্দর 🦳 সাধারন িি সুন্দর নয় িি কুৎসিত 🦳 |
| ৫। তোমার শারীরিক সক্ষমতায় তুমি কতখানি সন্তুষ্ট ? |
| সম্পূর্ণ সন্তুষ্ট 🔄 সন্তুষ্ট 🔄 মোটামুটি সন্তুষ্ট 🗌 পুরোপুরি সন্তুষ্ট নয়একেবারেই সন্তুষ্ট নয় |
| ৬। তোমার কণ্ঠস্বর কিরকম বলে তুমি মনে কর ? |
| শুতিমধুর 🗍 মধুর 🗍 সাধারন 🦳 শুতিমধুর নয় 🦳 একেবারেই শুতিমধুর নয় |
| ৭। তুমি কিরকম স্বাস্থ্য পেতে চাও ? |
| খুব ভালো 🗌 ভালো 🔲 সাধারন 🦳 দুর্বল 🦳 খুব দুর্বল 📃 |
| ৮। তোমার দৈহিক উচ্চতায় তুমি কতখানি সন্তুষ্ট ? |
| পুরপুরি সন্তুষ্ট 🔄 সন্তুষ্ট 🦳 মোটামুটি 🦳 কিছুটা সন্তুষ্ট 🦳 একেবারেই সন্তুষ্ট নয় 📃 |
| Social |
| ়৯। তোমার বন্ধুরা তোমার সঙ্গে শিক্ষামূলক কোনো পরামর্শ করে ? |
| সবসময় 🗌 স্বাভাবিক ভাবেই 🦳 কখনো কখনো 🦳 স্বাভাবিক ভাবে করেনা 🦳 কখনোই করেনা 🦳 |
| ১০। তুমি তোমার নিজস্ব চিন্তা ভাবনা বন্ধুদের কাছে খোলাখুলি ভাবে প্রকাশ কর ? |
| সবসময় 🗍 বেশীর ভাগ ক্ষেত্রে 🗌 স্বাভাবিক ভাবে 📄 কখনো কখনো 🦳 কখনোই নয় 🦳 |

| ১১। বন্ধুদের সঙ্গ তুমি কি পছন্দ কর ? |
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| সবসময় 🗌 বেশীরভাগ সময় 🗌 স্বাভাবিক ভাবেই 🗌 কখনো কখনো অপছন্দ করি 🦳 একেবারেই পছন্দ করিনা 🔄 |
| ১২। তোমরা বন্ধুরা যখন পিকনিকে যাও, তুমি কি তার পরিচালনায় অংশ নাও ? |
| সবসময় 🗌 স্বাভাবিক ভাবেই 🗌 সাধারনত 📃 স্বাভাবিক ভাবে নয় 🗌 একেবারেই করিনা 🦳 |
| ১৩। গুরুত্বপূর্ণ কাজ করার সময় তোমার বন্ধু যদি তোমাকে সঙ্গী করে বেড়াতে যেতে চায় তবে তুমি কি করবে ? |
| সঙ্গে সঙ্গে যাবো 🦳 কিছুক্ষন চিন্তা করার পর যাবো 🦳 চুপ করে থাকবো 🦳 |
| কিছুক্ষন চিন্তা করার পর যাবোনা 🗌 প্রথমেই না বলে দেবো 🔲। |
| ১৪। তুমি কি ছেলে / মেয়েদের (বীপরিত লিঙ্গ) সঙ্গে মিশতে দ্বিধা বোধ কর ? |
| কখনোই দ্বিধা বোধ করিনা 🗌 কখোন কখনো🦳 সাধারনত করি না🦳 স্বাভাবিক ভাবেই সবসময় |
| ১৫। তোমাকে চারটে কাজ করতে দেওয়া হল যেমন - |
| ক। বাড়ির অসুস্থ বয়স্ক ব্যক্তিকে দেখানোর জন্যে ডাক্তার ডাকতে বলা হল । |
| খ। পরের দিন দিল্লিতে তোমার ভাই এর কাছে জাওয়ার জন্য প্রস্তুত হতে বলা হল । |
| গ। তোমাকে একটি উপন্যাস পড়তে বলা হল । |
| ঘ। তোমাদের আত্মিয় বাইরে যাচ্ছে, তার সঙ্গে দেখা করতে বলা হল - |
| তুমি প্রথমে কোন কার্জাট করবে - |
| ক। বাড়ির অসুস্থ বয়স্ক ব্যক্তিকে দেখানোর জন্য ডাক্তার ডেকে আনবো । 📃 |
| খ। দিল্লি যাওয়ার জন্য প্রস্তুত হবো । 📃 |
| গ। উপন্যাসটি পড়তে শুরু করবো । 📃 |
| ঘ। আত্মিয়ের সঙ্গে দেখা করতে যাবো । |
| ঙ। উপরে উল্লিখিত কোনো কাজ করবো না । 📃 |
| ১৬। অন্যান্যদের প্রয়োজনের কথা মনে রেখে তুমি কি ধরনের কাজ করতে পছন্দ করবে ? ক। সব সময় অন্যের প্রয়োজনের কথা মনে রেখে কাজ করি । 🔄 |
| খ। স্বাভাবিক ভাবেই । 🔄 |
| গ। সাধারনত |
| ঘ। কখনো কখনো অন্যের পছন্দ অপছন্দের কথা ভাবি না । 📃 |
| ঙ। সব সময় নিজস্ব ইচ্ছার কথা ভাবি। 📃 |

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১৭। তুমি কি অন্যের সমালোচনা করতে ভালোবাস ? সবসময় 🚺 বেশীর ভাগ সময় 🔄 সাধারন ভাবে 🗌 স্বাভাবিক ভাবে না 🗌 কখনোই না তোমার আচরন কি অসংযত হয় ? 201 কখনো কখনো 🦳 কদাচিৎ 🦳 কখনোই নয় সবসময় িবিশীর ভাগ সময় তমি কি নিজেকে জ্ঞানী ব্যক্তি বলে মনে কর ? ১৯৷ খুব বেশী 🗍 স্বাভাবিক ভাবে 🦳 সাধারনত 🦳 কম জ্ঞানী 🦳 জ্ঞানহীন ২০। তুমি কি মনে কর সুযোগ পেলে তুমিও নতুন কিছু আবিষ্ণার করবে ? অবশ্যই 🗍 খুব সম্ভবত 🦳 সম্ভবত 🧻 আদৌ নয় সংশয় আছে ২১। কোন কাজ করার আগে তুমি কি তার সুবিধা অসুবিধা নিয়ে ভাবো ? স্বাভাবিক ভাবে নি সাধারনত নি সাভাবিক ভবে ভাবি না নি কখনোই ভাবি না নি সবসময় ২২। তোমার সহপাঠিদের তুলনায় তুমি কি বেশী বুদ্ধিমান /বুদ্ধিমতি ? স্বাভাবিক ভাবে 🔄 সাধারনত 🦳 কম বুদ্ধিমান 🦳 আদৌ বুদ্ধিমান নয় 🏾 অবশ্যই ২৩। তুমি কি নিজে নিজেই তোমার পড়াশোনার অসুবিধা এবং সমস্যার সমাধান কর ? সবসময় 📋 স্বাভাবিকভাবে 🗍 সাধারনত 🗌 স্বাভাবিকভাবে নয় 🗌 সব সময় অন্যের সাহায্য নিই 🦳 ২৪। কোন ছবি দেখার সময় বা আঁকার সময় তুমি কতখানি শিল্পীসুলভ মনোযোগ দাও ? খুব বেশী মনোযোগ দিই 🗌 বেশীর ভাগ মনোযোগ দিই 🦳 সাধারন মনোযোগ দিই 📃 কিছুটা মনোযোগ দিই 🦳 কোন মনোযোগ দিই না 🦳 Emotional

| ২৫৷ তে | হামার মনভাব (Attitude) কি রকম ? |
|------------|--|
| খুব হাসিখ্ | থুসি হাসিখুসি স্বাভাবিক কখনো কখনো খুশি নয় একেবারেই খুশি নয় |
| ২৬৷ তু | ্মি কি নিজেকে একজন আনন্দ দায়ক, উৎফুল্ল ব্যাক্তি মনে কর ? |
| সবসময় 🦳 | রি বেশীর ভাগ সময় নি সাধারনত নি না ি একেবারেই না ি |

Intellectual

| ২৭। তুমি কি নিজেকে শান্ত মেজাজের মানুষ ভাব ? |
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| সবসময় স্থিভাবতই সাধারনত কিছুটা নয় একেবারেই নয় |
| ২৮। তুমি কি অন্যদের তিরস্কার (insult) কর ? |
| একেবারেই নয় খুব বেশি নয় সভাবতই বিশীরভাগ সময় সবসময় |
| ২৯। কেউ যদি তোমার কাজের সমালোচনা করে তুমি কি খুব বিরক্তি প্রকাশ কর ? |
| একেবারেই না সভাবতই নয় কখনো কখনো সভাবতই সবসময় |
| ৩০। সামান্য অসুবিধাতেই তুমি কি বিরক্তি বোধ কর ? |
| কখনোই করিনা িবিশীর ভাগ সময় করিনা সাধরনত করি িকখনো কখনো করি িসবসময় করি |
| ৩১। তুমি কি আত্মকেন্দ্রিক (introvert) প্রকৃতির ? |
| আদৌ নয় 🦳 খুব বেশী নয় 🦳 সাধারনত 🦳 সাভাবিক ভাবেই 🦳 খুব বেশী 🦳 |
| ৩২। প্রবন্ধ বা সিনেমার শেষ জানতে তুমি কি খুব বেশী কৌতুহলী হও ? |
| সবসময় 🔄 স্বাভাবিক ভাবেই 🦳 সাধারনত 🦳 না 🦳 আদৌ না 🦳 |

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TEST ANXIETY

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| ১। গুর | ত্ত্বপূর্ণ পরীক্ষার সময় যত এগিয়ে আসে তোমার কি মনে হয় ? |
|----------|---|
| ক) | আমি খুব আনন্দিত হই। |
| খ) গ) | আমার উপর কোন প্রভাব পড়ে না । 🔄 বিষয় বস্তুর প্রতি আরও গভীর মনোযোগ দিই । 📃 |
| ঘ) | প্রস্তুতি সম্পূর্ণ করতে পারব কিনা তা নিয়ে উদ্বিগ্ন হই । 📃 |
| હ) | উদ্বিগ্ন, দ্বন্দ এবং বিরক্তিতে কেঁদে ফেলি। 🗌 |
| ২। পরী | ক্ষার হলে যদি প্রশ্নের উত্তর না মনে পড়ে তবে তুমি কি করবে ? |
| ক) | অন্য প্রশের উত্তর লিখতে শুরু করবো। |
| খ) | প্রশ্নটি বার বার পড়ে উত্তর মনে করার চেষ্টা করবো । 📃 |
| গ) | অন্যকে জিজ্ঞাসা করে প্রশ্নের উত্তর মনে করার চেষ্টা করবো । |
| ঘ) | প্রশ্নের উত্তর মনে না আসার জন্য উদ্বিগ্ন হয়ে উঠবো । |
| હ) | উদ্বিগ্ন, হতাশা ও দ্বন্দে ভেঙে পড়বো। 🗌 |
| ৩। গুরু | ত্বপূর্ণ পরীক্ষা চলাকালীন তোমার কি রকম মনে হয় ? |
| ক) | আমি আনন্দের সঙ্গে পরীক্ষা দিই । 🦳 |
| খ) | আমার কোন কিছুই মনে হয় না। 📃 |
| গ) | উপযুক্ত সময়ে শেষ করতে পারব কিনা তা নিয়ে দুশ্চিন্তা হয়। 📃 |
| ঘ) | অন্যের উত্তর লেখা দেখে আমি আরো গভীর মনোযোগী হবো । 📃 |
| હ) | পরীক্ষায় ব্যার্থ হতে পারি এই ভেবে হতাশ হয়ে পড়বো। 🗌 |
| ৪। পরী | ক্ষার শেষে যদি প্রশ্নের সঠিক উত্তর তোমার মনে আসে তবে তোমার কি অনুভব হয়? |
| ক) | এটা আমার উপর কোন প্রভাব ফেলবে না। |
| খ) | অন্য সব প্রশ্নের উত্তর সঠিক লিখেছি তাই ভয় পাই না । |
| গ) | নিজের প্রতি বিরক্ত হই এবং বিভ্রান্ত হয়ে পড়ি। 📃 |
| ঘ) | আমি ফেল করতে পারি এই ভয়ে উদ্বিগ্ন হব। 📃 |
| ષ્ઠ) | আমি হতাশা, দ্বন্দ ও বিরক্তিতে ভেঙে পড়বো। |

| ৫। শরাক্ষায় তোমার প্রস্তুাতর সবাকছু যথাযথ ভাবে না দিতে পারলে কি রকম অনুভব হয় ? |
|---|
| ক) আমি স্বাভাবিকভাবেই লিখতে থাকি। 🗌 |
| খ) এটা আমাকে কোনভাবে প্রভাবিত করে না। |
| গ) আরো মনযোগ সহকারে উত্তর লেখার চেষ্টা করি। 🗌 |
| ঘ) বন্ধুদের তুলনায় কম নম্বর পাবো ভেবে উদ্বিগ্ন হই। 🦳 |
| ঙ) ব্যর্থতার ভয়ে, হতাশায় ও দ্বন্দে আমি কেঁদে ফেলি। 🗌 |
| ঁড। গুরুত্বপূর্ণ পরীক্ষা দেওয়ার সময় তোমার মন যদি এলোমেলো এবং অসংলগ্ন থাকে তবে তুমি কি করবে ? |
| ক) এই বিষয়ে কোন গুরুত্ব দেব না। |
| খ) স্বাভাবিক ভাবেই আমি লিখতে থাকব। 📋 |
| গ) লেখার প্রতি আরো গভীর মনোযোগ দেবার চেষ্টা করবো। 🗌 |
| ঘ) যথাযথ উত্তর যদি না লিখতে পারি সে জন্য উদ্বিগ্ন হব। 🗌 |
| ঙ) পরীক্ষায় ব্যার্থতার ভয়ে আমি হতাশ হয়ে পড়বো। 🗌 |
| ৭। পরীক্ষার তারিখ ঘোষণা হওয়ার পর তুমি কি অনুভব করবে ? ক) কোন প্রতিক্রিয়া হবে না |
| খ) আমি কিছুটা উত্তেজনা অনুভব করবো 📃 গ) আমি আনন্দিত হব । 🗌 |
| ঘ) আমি উদ্বিগ্ন হয়ে উঠব। |
| ঙ) পরীক্ষার প্রস্তুতির কথা চিন্তা করলে আমি অত্যন্ত ভয় পাই । 🗌 |
| ৮। পরীক্ষা আরম্ভের দিনে তুমি কেমন অনুভব কর ? |
| ক) আমি আনন্দিত হই। |
| খ) পরীক্ষার ফলাফলে আমি পাশ না ফেল করবো এই দ্বৈত্য দ্বন্দে পড়ে যাই। |
| গ) এই বিষয়ে কেউ প্রশ্ন করলে আমি রেগে যাই। 🦳 |
| ঘ) পরীক্ষার হলে প্রবেশ করার শেষ মুহুর্ত পর্যন্ত আমি ক্রমাগত পড়ি। |
| ঙ) আমার পড়ার বিষয়গুলি ভুলে গেলে আমি বিদ্রান্ত বোধ করি। 🛄 |
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| , ৯। কোন ধরনের চিন্তাধারা পরীক্ষার হলে তোমার উত্তরদানের প্রক্রিয়াকে পাল্টে দেয় ? |
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| ক) প্রশ্নের উত্তর দেওয়ার জন্য আমি পুরোপুরি নিমগ্ন হয়ে যাই। 🗌 |
| খ) আমি প্রায়শই অনুভব করি যে আমি সবকিছু ঠিকঠাক লিখছি। 🗌 |
| গ) আমার উত্তর হয়ত পরীক্ষকের বিরক্তি উদ্রেক করবে এই উদ্বেগে ভুগি। 🗌 |
| ঘ) আমি হয়ত ফেল করব এই ভেবে আমার হৃৎকম্প বেড়ে যায়। 🗌 |
| ঙ) অত্যন্ত ভয় এনং উদ্বেগের জন্য আমি কিছুই লিখতে পারিনা। 🦳 |
| ১০। পরীক্ষার প্রস্তুতির সময় কেউ ব্যাঘাৎ ঘটালে তুমি কিরকম অনুভব করবে ? |
| ক) আমি আনন্দের সঙ্গে পড়া বন্ধ করি এবং তৎক্ষনাৎ অন্য কাজে যুক্ত হই। 🗌 |
| খ) পরীক্ষার পড়া ছাড়া অন্য কোন কাজ করি না। 🗌 |
| গ) অন্য কোন কাজ আমার পড়াকে ব্যাহত করলে আমি বিরক্ত হই। |
| ঘ) আমার পড়ায় ব্যাঘাত ঘটার জন্য হৃদস্পন্দন বেড়ে যায়। 🗌 |
| ঙ) পরীক্ষার পড়া ভালোভাবে তৈরী করতে পরবোনা এই ভেবে আমি উদ্বিগ্ন হই এবং হৃদস্পন্দন বেড়ে যায়। 🗌 |
| ১১। পরীক্ষার হলে উত্তর লেখায় যদি কেউ তোমাকে সাহায্য করে তবে তুমি কেমন অনুভব |
| করবে ? ক) আমি অত্যন্ত খুশি হই। |
| খ) তার বোকামিতে আমি লজ্জা পাই। 🗌 |
| গ) আমি তার দিকে তাকানোর প্রয়োজন মনে করি না। |
| ঘ) আমি তার উপর প্রচন্ড রেগে যাই। 🗌 |
| ঙ) উদ্বেগ দ্বন্দ এবং বিভ্রান্তিতে আমি সব কিছু ভুলতে শুরু করি। 🗌 |
| ১২। পরীক্ষার হলে পরিদর্শক যদি তোমাকে এডমিট কার্ডে রোল নং দেখাতে বলে এবং তুমি যদি তা আনতে ভুলে যাও তবে তুমি কেমন অনুভব করবে ? |
| ক) কোন রকম ইতস্তত ছাড়াই আমি জানাবো যে আমি আনতে ভুলে গিয়েছি । |
| খ) আমি কোন ভাবেই বিব্রত হব না। 🗌 |
| গ) আমি কিছুটা অস্থির হয়ে উঠব। 🔄 |
| ঘ) পরীক্ষা হল থেকে বের করে দেবে এই ভয়ে হৃদস্পন্দন বেড়ে যাবে। 🗌 |
| ঙ) ভয়, দ্বন্দ এবং বিভ্রান্তিতে আমি কাঁদতে শুরু করব। 📃 |
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| । ७८ ए (— | পরাক্ষার আগের দিন তুমি সম্ভাব্য কিছু প্রশ্ন পড়ে গেলে এবং পরের দিন দেখলে নগুলোর বেশীরভাগ আসেনি, এ মুহুর্তে তুমি কেমন অনুভব করবে ? নির্বুর নাম ক্রম ক্রম ক্রমের ক্রিবুর ফিল্বু দিয়ে। |
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| খ) | প্রশ্ন কর্তার উপর আমি অত্যন্ত রেগে যাব। |
| গ) | আমি ভীষণ হতাশ হয়ে পড়ব । |
| ঘ) | পরীক্ষায় ফেল করার ভয় এবং উদ্বেগ আমাকে গ্রাস করবে। 🗌 |
| હ) | ভয়, দ্বন্দ, হতাশা এবং বিরক্তিতে আমি কাঁদতে শুরু করব । |
| 281 2 | অন্য কোন কারনে তোমার আসন্ন পরীক্ষার প্রম্ভুতিতে যদি তুমি সন্তুষ্ট না হও তবে কি করবে ? |
| ক) | পাস করতে নাও পারি এটা জেনেও আমি পরীক্ষায় বসার চেষ্টা করবো। 📃 |
| খ) | কোন রকম উদ্বেগ ছাড়াই আমি পরীক্ষায় বসবো। |
| গ) | আমি পরীক্ষায় না বসার কথাই ভাববো। |
| ঘ) | পরীক্ষায় ফেল করার ভয় এবং উদ্বেগের ফলে পরীক্ষায় উপস্থিত হওয়াকে এড়িয়ে চলবো। 🗌 |
| હ) | আমি অবশ্যই পরীক্ষায় ফেল করব এই ভয়, দ্বন্দ, হতাশা অনুভব করে পরীক্ষায় বসবো না |
| ১৫। প ত | রীক্ষার হলে; তুমি যখন উত্তর লেখায় ব্যস্ত তখন পরিদর্শক যদি তোমার সাথে কথা বলেন বে তুমি কি অনুভব করবে ? |
| ক) | আমি সেই কথায় অংশগ্রহন করবো । 🗌 |
| খ) | কথার সাথে নিজেকে যুক্ত না করে উত্তর লেখায় ব্যাস্ত থাকবো । 📃 |
| গ) | পরীক্ষা চলাকালীন কথা বলার জন্য পরিদর্শকের উপর রেগে যাব। |
| ঘ) | মনোযোগ বিচ্যুত হওয়া এবং ব্যার্থতার ভয়ে আমার হাৎস্পন্দন দ্রুত বৃদ্ধি পাবে 💭 |
| હ) | লেখায় ব্যাঘাৎ ঘটার জন্য আতিরিক্ত রাগে প্রশ্নের উত্তর ভুলে যাবো । 🦳 |
| জু ।৬ ৫ তু | ড়ান্ত পরীক্ষার প্রস্তুতির সময় তোমার বাড়িতে যদি অনেক জন আত্রীয় আসেন তবে মি কি রকম অনুভব করবে ? |
| ক) | আমি আনন্দের সঙ্গে অতিথীদের আপ্পায়ন করবো । 🗌 |
| খ) | এক ঘেয়েমি পড়াশোনার থেকে নিজেকে কিছুটা হালকা করবো এবং তাদের সাথে কথা বলে আনন্দ করবো । 🦳 |
| গ) | অসময়ে আগমনের জন্যে আমি তাদের উপর রেগে যাবো । 📃 |
| ঘ) | আসন্ন পরিক্ষায় বসার উদ্বেগে আমি অত্যন্ত ভেঙে পড়বো। 📃 |
| હ) | অতিরিক্ত উদ্বেগ এবং ব্যার্থতার ভয়ে আমি অনুভব করবো যা কিছু শিখেছি সব ভূলে যাচ্ছি । 🦳 |

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| | ડેરા જ | ারীক্ষা চলা কালীন অসঙ্গত কারনে যদি তুমি পরিদর্শকের হাতে ধরা পড় তবে তুমি কি করবে ? |
| | ক) | এর কোন প্রভাব আমার উপর পড়বে না কারন স্বাভাবিক ভাবেই ক্ষমা করবেন। 🗌 |
| | খ) | এর জন্য কি পরিস্থিতি হবে না ভেবেই আমি পরীক্ষার হল ত্যাগ করবো । 🗌 |
| | গ) | আমি আমার অসৎ আচরনের জন্যে ক্ষমা পার্থনা করবো । 🗌 |
| | ঘ) | পরিক্ষায় ব্যার্থ হওয়ার উদ্বেগ বৃদ্ধি পাবে। |
| | હ) | আমি অপরকে কিভাবে মুখ দেখাবো এই উদ্বেগ আমার মধ্যে জাগ্রত হবে । 🗌 |
| 2 | ১৮। ^হ | শরীক্ষা চলা কালীন যদি প্রতিষ্ঠানের প্রধান পরিদর্শনে আসেন তবে তুমি কেমন অনুভব কর ? |
| | ক) | এর জন্য প্রভাব পড়বে না কারন এটি সাভাবিক বিষয়। 🗌 |
| | খ) | আমি মিনোযোগ সহকারে লিখব এবং প্রধানকেও দেখবো। 🗌 |
| | গ) | আমার আচরনকে শান্ত করবো এবং নিজেকে ভালো ছাত্র হিসেবে উপস্থিত করার চেষ্টা করবো । |
| | ঘ) | আমি বিরক্তি বোধ করবো । |
| | હ) | প্রতিষ্ঠানের প্রধান প্রবেশ করার সাথে সাথে আমি ভিত হয়ে উঠবো। 🦳 |
| | ১৯৷ প | রীক্ষা চলাকালীন যদি তোমার কলমে কালি না বেরোয় তবে তুমি কি প্রতিক্রিয়া করবে ? |
| | ক) | কোন বিরক্ত ছাড়াই অন্য ছাত্রর কাছ থেকে পেন চেয়ে নেব এবং লিখতে শুরু করবো। 🗌 |
| | খ) | ঐ পেন দিয়েই আমি লেখার চেষ্টা করবো । 📃 |
| | গ) | আমি কিছুটা বিরক্ত হব এবং অন্যর কাছ থেকে কলম জোগাড় করার চেষ্টা করবো । |
| | ঘ) | আমার লেখা উত্তরের দিকে তাকিয়ে থাকবো এবং এই খারাপ পরিস্থিতির জন্য অত্যন্ত বিরক্ত হয়ে উঠব । 🗌 |
| | ષ્ઠ) | ব্যার্থতার জন্য অত্যন্ত ভয়ে আমি কাঁদতে শুরু করবো এবং পরীক্ষার হল থেকে বেরিয়ে আসবো । |
| : | ২০। | ফলাফল ঘোষনার সময় তুমি ফেল করলে কি রকম অনুভব করবে ? |
| | ক) | আমি একটুও দুঃখিত হবো না । 📃 |
| | খ) | সেই মুহূর্তে আমি বিচ্যুত হব । 🗌 |
| | গ) | পরীক্ষকের উপর আমি রেগে যাব । |
| | ঘ) | আমি অত্যন্ত উদ্বিগ্ন হয়ে উঠব। |
| | હ) | অত্যন্ত দুঃখ, লজ্জা এবং হতাসায় বাড়ির বার হতে পারবো না । |

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| ২স | তোমার চ্যাহণা অনুযায়া লুজ খাতা যাদ দেরি করে দেওয়া হয় তবে তুমি কি প্রতিক্রিয়া করবে ? |
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| ক) | আমার খাতার দিকে তাকিয়ে থাকবো। |
| খ) | লুজ খাতা পাওয়ার জন্য কষ্ট করে অপেক্ষা করবো । 🗌 |
| গ) | আমি উঠে দাড়িয়ে লুজ খাতা তাড়াতাড়ি দেওয়ার জন্য বলবো । |
| [,] .घ) | দেরি করে উত্তর পত্র (লুজ শিট) দেওয়ার জন্য আমি ক্ষুদ্ধ হব। 🗌 |
| ଓ) | দেরি করে উত্তর পত্র দেওয়ার জন্য আমি সব কিছু ভূলে যেতে পারি এই চিন্তা করে আমি রেগে যাবো এবং উদ্বিগ্ন হবো । |
| ২২। | পরীক্ষার সময় তুমি অসুস্থ হয়ে পড়লে কি করবে ? |
| ক) | পরীক্ষার পড়া তৈরী থেকে কিছুটা অব্যাহতি পাবো । 🗌 |
| খ) | পরবর্তী পরীক্ষায় আরো ভালো প্রস্তুতি করবো এই চিন্তা করবো । 🗌 |
| গ) | পরীক্ষার দিনে অসুস্থ হওয়ার জন্য দোষী অনুভব করবো । 🗌 |
| ঘ) | বন্ধুদের তুলায় এক বছর পিছিয়ে যাবো এই জন্য উদ্বিগ্ন হবো । 🦳 |
| હ) | অসুস্থ অবস্থায় পরীক্ষায় বসার চেষ্টা করবো । 📃 |
| ২৩। | পরীক্ষা শুরুর মুহূর্তে তুমি যদি দেখ অন্যান্য ছাত্ররা তাদের নোটস এবং বই খুব মনোযোগ সহকারে পড়ছে তখন তুমি কিরকম অনুভব করবে ? |
| ক) | আমি তাদের প্রতি পরিহাস করবো। 🗌 |
| খ) | ঐ ছাত্রদের দেখে আসন্ন পরিক্ষার জন্যে আমি উদ্বিগ্ন হব। |
| গ) | তাদের প্রতি কোন মনোযোগ ছাড়াই আমি পরীক্ষার হলে নিজের সীটে গিয়ে বসবো । 🗌 |
| ঘ) | আমি তাদেরকে জিজ্ঞাসা করবো কোন গুরুত্বপূর্ণ বিষয় তারা পড়ছে , এই সময়ে। |
| ષ્ટ) | তাদের মনোযোগ সহকারে পড়া দেখে আমার পড়া বিষয় অত্যন্ত উদ্বেগে এবং ভয়ে সমস্ত কিছু ভুলে যাবো । 🦳 |

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